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Energy Use by Type of Fuel

This chapter is divided into four sections, presenting energy use data by fuel type: petroleum, natural gas, coal and electricity. Sections on each fuel begin with a table showing the amount of fuel used in each economic sector. These tables illustrate various trends, such as an increasing share of petroleum used for transportation.*

Tables in this chapter provide more specific information than those in Chapter 2. Petroleum use, for example, is broken out by product type to show the differing consumption levels of gasoline (excluding ethanol,

a renewable fuel), heating oil and liquefied petroleum gas (propane), over time. Also shown is the distribution of specific petroleum products among the economic sectors. More extensive information is provided here in terms of Wisconsin's energy supply sources.

Recently, nationally and in Wisconsin, increasing amounts of natural gas have been used in the generation of electricity. The residential sector continues to be the largest user of natural gas in Wisconsin.

* Petroleum used for transportation is allocated to the transportation sector and is not included in other sectors.

Wisconsin Petroleum Use, by Economic Sector 1970-2007

(Trillions of Btu and Percent of Total)

Overall petroleum use measured in British thermal units (btu) increased 0.3 percent in 2007. In 2007, 83.5 percent of the petroleum used in Wisconsin was for transportation.

Agriculture sector numbers do not include agricultural processing plants; these are classified in the commercial sector.

Year	Residential		Commercial		Industrial		Agricultural		Transportation		Electric Utility		Total
1970	107.9	(23.6%)	31.5	(6.9%)	21.1	(4.6%)	18.1	(4.0%)	271.2	(59.3%)	7.9	(1.7%)	457.7
1975	87.6	(18.4)	27.5	(5.8)	19.3	(4.1)	18.8	(4.0)	314.0	(66.1)	7.8	(1.6)	475.0
1980	71.2	(15.7)	14.6	(3.2)	13.2	(2.9)	21.4	(4.7)	329.2	(72.4)	4.8	(1.1)	454.4
1985	51.7	(12.5)	16.0	(3.9)	9.4	(2.3)	19.2	(4.7)	314.4	(76.3)	1.4	(0.3)	412.1
1990	42.6	(9.6)	15.0	(3.4)	22.1	(5.0)	16.0	(3.6)	348.0	(78.3)	1.0	(0.2)	444.7
1995	40.8	(8.6)	13.4	(2.8)	18.5	(3.9)	15.6	(3.3)	386.2	(81.3)	0.8	(0.2)	475.3
2000	38.8	(7.7)	12.1	(2.4)	20.5	(4.0)	14.4	(2.8)	419.8	(82.8)	1.6	(0.3)	507.2
2001	36.7	(7.2)	11.5	(2.3)	25.0	(4.9)	14.0	(2.7)	420.9	(82.6)	1.3	(0.3)	509.4
2002	38.0	(7.3)	11.8	(2.3)	19.2	(3.7)	14.4	(2.8)	433.7	(83.5)	2.1	(0.4)	519.2
2003	39.6	(7.6)	12.2	(2.3)	20.4	(3.9)	14.6	(2.8)	434.4	(83.2)	1.2	(0.2)	522.4
2004	38.3	(7.2)	11.7	(2.2)	23.5	(4.4)	14.3	(2.7)	442.8	(83.2)	1.5	(0.3)	532.1
2005 ^a	37.6	(7.3)	11.5	(2.2)	25.5	(4.9)	13.1	(2.5)	427.4	(82.7)	1.8	(0.3)	516.9
2006 ^{r,a}	35.1	(6.8)	10.6	(2.1)	24.0	(4.7)	17.4	(3.4)	425.8	(82.8)	1.4	(0.3)	514.2
2007 ^{p,a}	34.7	(6.7)	10.3	(2.0)	19.5	(3.8)	19.1	(3.7)	430.6	(83.5)	1.7	(0.3)	515.9

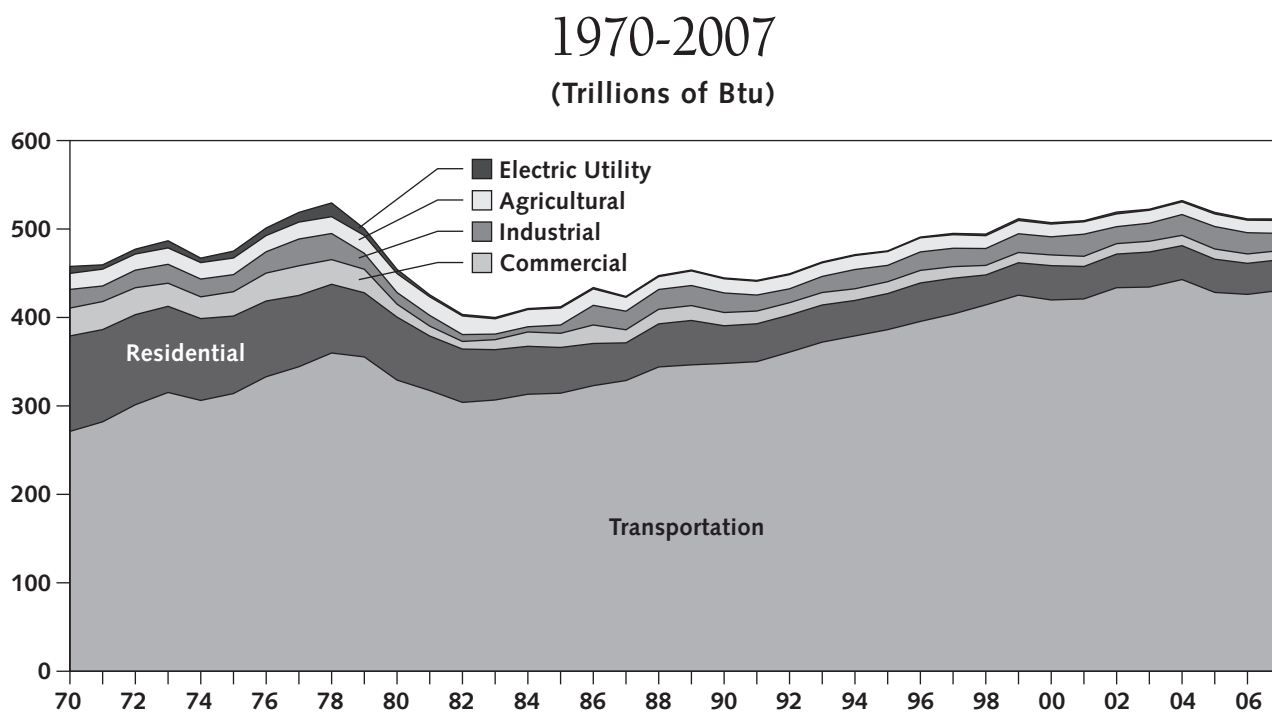
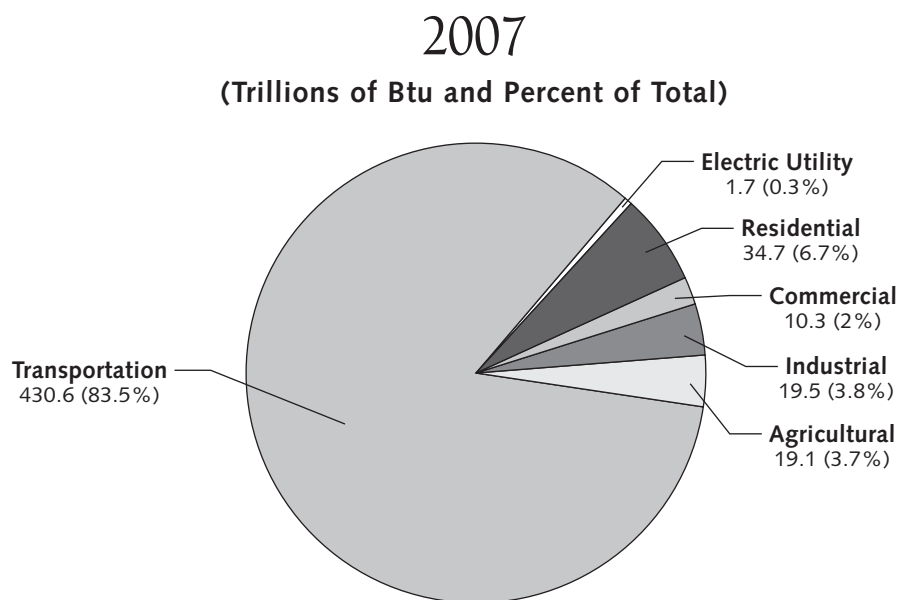
^a OEI discontinued a per-acre approach to gathering fuel data for the agriculture sector and substituted data from the Wisconsin Department of Revenue and from the federal National Agriculture Statistics Service (NASS). Data from NASS were not available previously. Using former methodology, the figures for 2005 through 2007 are: 2005, 14.2 (2.7%); 2006, 14.2 (2.8%); and 2007, 14.6 (2.8%).

^p Preliminary estimates.

^r Revised.

Source: Wisconsin Department of Commerce, Bureau of Petroleum Inspection, *Report on Petroleum Products Inspected and Delivered to Wisconsin* (1970-1995); Wisconsin Department of Revenue, *Collection of Petroleum Inspection Fees* (1996-2006) and *Fuel Tax Statistical Report* (1996-2007); Office of Energy Independence phone surveys of airport fixed base operators and railways; US Department of Energy, Form EIA-782C, "Monthly Report of Petroleum Products Sold Into States for Consumption" (1983-2007); US Department of Energy, Form EIA-821 (2007); unpublished data from the National Agriculture Statistics Service.

Wisconsin Petroleum Use, by Economic Sector



Source: Wisconsin Office of Energy Independence.

Wisconsin Petroleum Use, in Btu, by Type of Product 1970-2007 (Trillions of Btu)

Middle distillate is used both as a heating fuel in furnaces and boilers, and as diesel fuel in trucks. Light distillate includes kerosene and is primarily used as a thinner during periods of cold weather.

Year	Gasoline ^{a,b}	Jet Fuel	Light Distillate	Middle Distillate	Residual Fuel Oil	LPG ^c	Total
1970	244.1	7.7	35.1	123.4	21.9	25.7	457.9
1975	275.4	9.8	16.9	133.5	13.3	26.0	474.9
1980	271.3	11.0	11.3	124.7	11.0	25.2	454.5
1985	254.3	8.4	13.4	110.7	2.3	23.1	412.2
1990	267.8	11.0	10.8	122.3	7.9	24.8	444.6
1995	285.3	10.6	9.6	131.3	7.6	30.9	475.3
2000	307.7	11.7	11.1	141.1	5.3	30.3	507.2
2001	309.7	11.5	11.2	142.2	5.6	29.2	509.4
2002	320.3	11.9	11.2	141.4	4.3	30.1	519.2
2003	322.7	11.6	11.1	142.3	3.9	30.8	522.4
2004	323.5	12.5	11.6	146.9	6.8	30.7	532.0
2005 ^r	309.3	14.3	11.2	142.5	9.2	30.4	516.8
2006 ^r	299.2	13.9	11.8	151.6	8.1	29.6	514.3
2007^p	304.3	12.8	11.5	149.5	6.9	30.9	515.9

^a Includes both vehicle and aviation gasoline.

^b Does not include ethanol. Ethanol use in motor gasoline is shown in the Renewable Energy chapter.

^c Liquefied petroleum gas (propane).

^p Preliminary estimates.

^r Revised.

Source: Wisconsin Department of Commerce, Bureau of Petroleum Inspection, *Report on Petroleum Products Inspected and Delivered to Wisconsin* (1970-1995); Wisconsin Department of Revenue, *Collection of Petroleum Inspection Fees* (1996-2006) and *Fuel Tax Statistical Report* (1996-2007); U.S. Department of Energy, Form EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption" (1983-2007); WI Office of Energy Independence telephone surveys of airport fixed base operators and railways; unpublished expenditure data from the National Agriculture Statistics Service.

Wisconsin Petroleum Use, in Gallons, by Type of Product 1970-2007

(Millions of Gallons)

In 2007, gasoline use increased by 1.7 percent, jet fuel decreased by 8.1 percent, and LP use increased by 4.4 percent.

Year	Gasoline ^{a,b}	Jet Fuel	Light Distillate	Middle Distillate	Residual Fuel Oil	LPG ^c	Total
1970	1,953.0	56.7	260.2	889.7	146.2	269.0	3,574.8
1975	2,203.5	72.4	125.0	962.8	88.8	272.6	3,725.1
1980	2,170.5	81.4	83.4	899.4	73.5	264.1	3,572.3
1985	2,033.3	62.2	99.2	798.2	15.5	241.5	3,249.9
1990	2,139.5	81.6	80.1	882.2	52.7	260.2	3,496.3
1995	2,266.6	78.6	72.3	946.4	50.5	323.8	3,738.2
2000	2,431.2	87.0	82.2	1,017.4	35.4	317.5	3,970.7
2001	2,450.1	85.0	82.9	1,025.6	37.2	306.1	3,986.9
2002	2,533.7	88.2	82.3	1,020.3	28.8	314.7	4,068.0
2003	2,549.0	86.1	82.0	1,025.8	26.4	322.6	4,091.9
2004	2,555.6	92.5	86.1	1,059.4	45.5	321.6	4,160.7
2005	2,474.6	105.7	82.6	1,027.7	61.6	318.6	4,070.9
2006	2,393.6	102.9	87.7	1,093.5	54.1	310.4	4,042.1
2007 ^p	2,434.2	94.6	85.4	1,078.1	46.0	323.9	4,062.2

^a Includes both vehicle and aviation gasoline.

^b Does not include the ethanol component of reformulated gasoline or gasohol; refer to page 27 of this chapter and the Renewable Energy chapter.

^c Liquefied petroleum gas (propane).

^p Preliminary estimates.

Source: Wisconsin Department of Commerce, Bureau of Petroleum Inspection, *Report on Petroleum Products Inspected and Delivered to Wisconsin* (1970-1995); Wisconsin Department of Revenue, *Collection of Petroleum Inspection Fees* (1996-200176) and *Fuel Tax Statistical Report* (1996-2006); U.S. Department of Energy Form EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption" (1983-2007); WI Office of Energy Independence telephone surveys of airport fixed base operators and railways; unpublished data from the National Agriculture Statistics Service.

Petroleum Product Deliveries to Wisconsin, by Month 2007

(Thousands of Gallons)

In general, gasoline sales peaked during the summer vacation months, while sales of fuels used for heating (off-road distillate and LPG) peaked during winter months.

Month	Off-Road Distillate ^a	On-Road Distillate ^b	LPG ^c	Gasoline ^d
January	11,396	68,814	42,231	198,532
February	12,325	59,872	51,791	192,240
March	9,815	68,599	28,838	197,836
April	8,967	55,452	18,738	211,429
May	8,100	68,102	10,549	207,097
June	7,132	71,473	8,773	242,488
July	7,960	67,680	11,381	229,711
August	7,667	60,484	14,546	245,261
September	7,328	59,960	15,201	215,511
October	8,186	73,879	25,999	224,712
November	9,732	62,631	28,716	212,576
December	10,910	63,440	40,631	215,188
Total	109,518	780,385	297,394	2,592,580

^a Kerosene, No. 1 and No. 2 fuel oil used for heating and processing, jet fuel and aviation gasoline used for flying. Does not include non-taxed diesel fuel used on farms. Numbers in italics are incomplete data because some data are withheld by the federal Energy Information Administration to protect reporter identification.

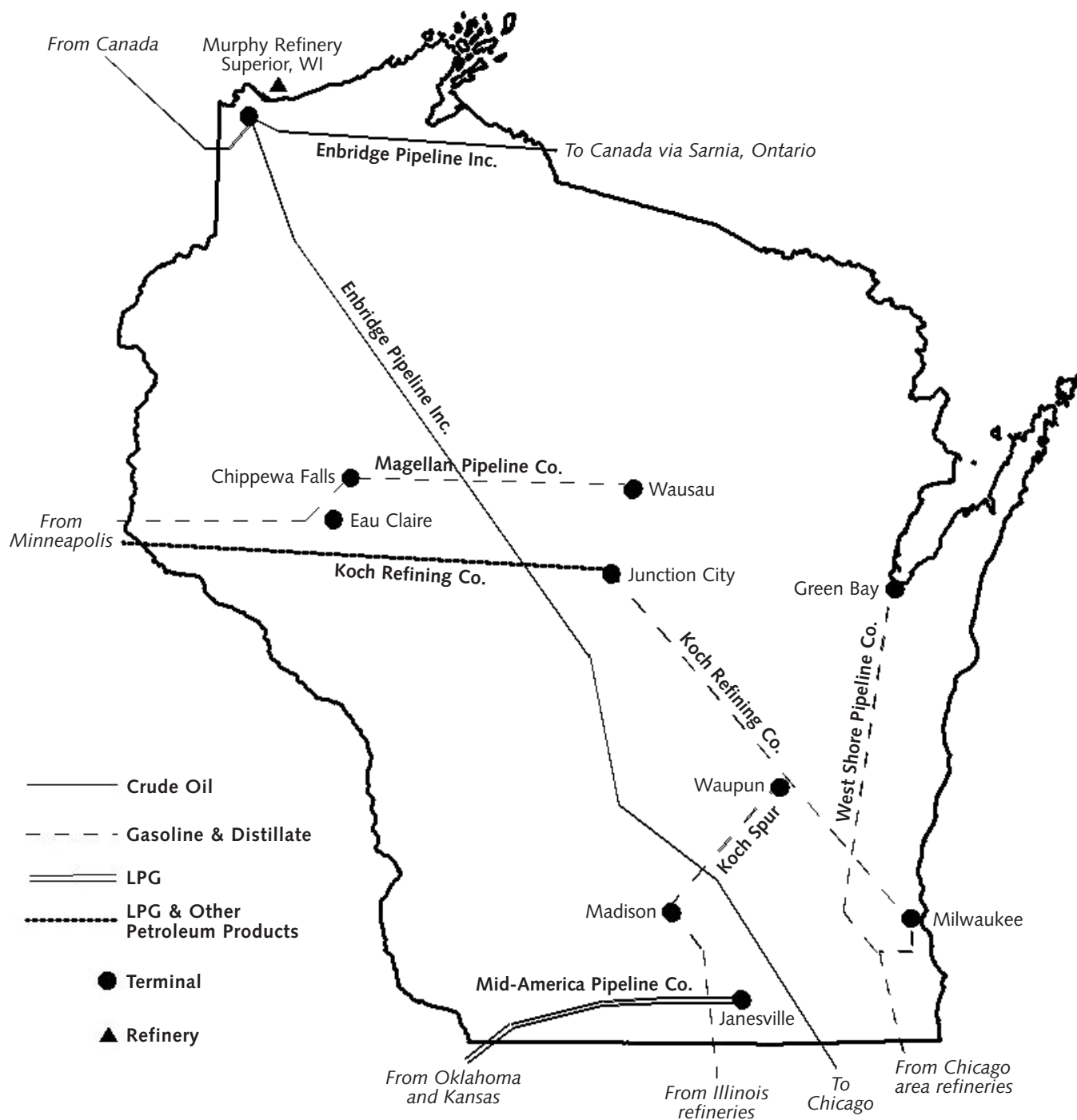
^b On-road diesel fuel.

^c Liquefied petroleum gas (propane).

^d Vehicle gasoline only; does not include aviation gasoline.

Source: Wisconsin Department of Revenue, *Monthly Motor Fuel Consumption Report* (2007); U.S. Department of Energy, Form EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption" (2007).

Wisconsin Petroleum Pipelines



Source: Wisconsin Office of Energy Independence.

Wisconsin Production and Use of Ethanol in Reformulated Gasoline, E10 and E85, 1994-2007

(Thousands of Gallons)

In 2007, Wisconsin ethanol production capacity jumped 34.9 percent. Ethanol use in Wisconsin increased 23.6 percent with increased consumption of RFG, E10 and E85. The increase in ethanol usage in Wisconsin is related to a number of factors including: major oil companies blending ethanol with gasoline at retail locations to stretch gasoline; the number of E85 gas stations increased^d; retail outlets where E85 is sold are likely to sell E10 at their other pumps; and the increase in overall ethanol production leads to an increased market share for ethanol-blended fuels.

Year	Production	Consumption			Total
		RFG ^a	E10 ^b	E85 ^c	
1994	NA	NA	13,331	9	13,340
1995	NA	38,048	10,461	17	48,526
2000	NA	70,724	23,080	43	93,847
2001	NA	67,449	18,458	32	85,939
2002	15,529	71,152	17,026	48	88,226
2003	76,947	77,302	23,536	86	100,924
2004	106,886	74,816	27,617	106	102,539
2005	171,764	73,046	49,186	723	122,955
2006	210,386	77,614	50,487	2,302	130,403
2007	283,800	69,963	86,397	4,875	161,235

^a RFG is reformulated gasoline. Starting January 1, 1995, the federal government mandated its sale in six southeastern Wisconsin counties to comply with the Clean Air Act. Ethanol is used to provide the oxygenate required in RFG.

^b E10 is a motor fuel blend consisting of 10 percent ethanol and 90 percent conventional gasoline (non RFG).

^c E85 is a motor fuel consisting of 85 percent ethanol and 15 percent gasoline.

^d From August 2007 to August 2008, the number of E85 gas stations increased from 67 to 111.

NA – Not Available.

Source: Wisconsin Department of Revenue; Wisconsin Office of Energy Independence; West Shore and Flint Hills Pipelines.

Wisconsin Liquefied Petroleum Gas Use, by Economic Sector 1970-2007

(Millions of Gallons and Percent of Total)

Liquefied petroleum gas (LPG), (propane), use increased 4.3 percent in 2007.

Agriculture sector numbers do not include agricultural processing plants; these are classified in the commercial sector.

Year	Residential		Commercial		Industrial		Agricultural		Transportation		Total
1970	190.9	(70.9%)	23.8	(8.8%)	28.2	(10.5%)	26.2	(9.7%)	NA	(0.0%)	269.1
1975	176.5	(64.7)	36.5	(13.4)	29.5	(10.8)	30.1	(11.0)	NA	(0.0)	272.6
1980	176.3	(66.7)	33.5	(12.7)	17.5	(6.6)	36.9	(14.0)	NA	(0.0)	264.2
1985	158.2	(65.5)	29.4	(12.2)	19.3	(8.0)	34.6	(14.3)	NA	(0.0)	241.5
1990	162.1	(62.3)	36.5	(14.0)	35.7	(13.7)	25.9	(10.0)	NA	(0.0)	260.2
1995	203.8	(62.9)	48.0	(14.8)	35.0	(10.8)	30.9	(9.5)	6.1	(1.9)	323.8
2000	211.0	(66.5)	47.2	(14.9)	28.7	(9.0)	25.3	(8.0)	5.3	(1.7)	317.5
2001	204.0	(66.6)	45.8	(15.0)	28.3	(9.2)	23.4	(7.6)	4.6	(1.5)	306.1
2002	213.1	(67.7)	47.6	(15.1)	26.0	(8.3)	24.0	(7.6)	4.0	(1.3)	314.7
2003	224.0	(69.4)	50.0	(15.5)	22.0	(6.8)	22.8	(7.1)	3.8	(1.2)	322.6
2004	221.3	(68.8)	49.5	(15.4)	23.1	(7.2)	24.1	(7.5)	3.6	(1.1)	321.6
2005 ^a	220.4	(69.2)	49.3	(15.5)	23.3	(7.3)	22.7	(7.1)	3.0	(0.9)	318.7
2006 ^a	210.7	(67.9)	46.6	(15.0)	22.8	(7.3)	27.1	(8.7)	3.2	(1.0)	310.4
2007 ^{P,a}	224.6	(69.4)	49.4	(15.3)	23.4	(7.2)	24.1	(7.4)	2.3	(0.7)	323.8

NA – Not available.

^a OEI discontinued a per-acre approach to gathering fuel data for the agriculture sector and substituted data from the Wisconsin Department of Revenue and from the federal National Agriculture Statistics Service (NASS). Data from NASS were not available previously. Using former methodology, the figures for 2005 through 2007 are: 2005, 20.5 (6.4%); 2006, 19.7 (6.3%); and 2007, 19.7 (6.1%).

^P Preliminary estimates.

Source: U.S. Department of Energy, Form EIA-25, "Prime Supplier's Monthly Report" (1974-1982) and Form EIA-782C, "Monthly Report of Petroleum Products Sold Into States For Consumption" (1983-2007).

Wisconsin Natural Gas Use, by Economic Sector 1970-2007

(Trillions of Btu and Percent of Total)

In 2007, cold winter weather led to increased natural gas use in the residential sector. In the electric sector, natural gas used to generate electricity increased by 22.5 percent. The electric sector includes natural gas used by utilities and independent power producers who generate and sell electricity to other companies. Overall, natural gas use increased by 4 percent from 2006. Natural gas use is up 12.4 percent from 1990.

Year	Residential		Commercial ^a		Industrial		Electric ^b		Total	Total End Use
1970	109.4	(33.2%)	42.2	(12.8%)	147.1	(44.6%)	31.1	(9.4%)	329.8	298.7
1975	119.2	(32.6)	57.0	(15.6)	169.1	(46.3)	19.8	(5.4)	365.1	345.3
1980	124.5	(36.1)	61.4	(17.8)	144.5	(41.9)	14.1	(4.1)	344.5	330.4
1985	117.7	(38.6)	59.8	(19.6)	126.1	(41.3)	1.4	(0.5)	305.0	303.6
1990	114.7	(37.4)	66.7	(21.8)	122.6	(40.0)	2.4	(0.8)	306.4	304.0
1995	137.5	(36.1)	85.8	(22.5)	147.7	(38.8)	10.1	(2.7)	381.1	371.0
2000	136.4	(34.8)	81.9	(20.9)	154.1	(39.3)	19.6	(5.0)	392.0	372.4
2001	126.4	(35.1)	77.3	(21.5)	133.8	(37.2)	22.6	(6.3)	360.1	337.5
2002	138.3	(36.0)	86.5	(22.5)	138.8	(36.1)	20.7	(5.4)	384.3	363.6
2003	143.1	(36.3)	88.0	(22.3)	138.6	(35.2)	24.3	(6.2)	394.0	369.7
2004	135.7	(35.6)	82.6	(21.6)	141.9	(37.2)	21.4	(5.6)	381.6	360.2
2005	132.9	(32.2)	87.5	(21.2)	132.3	(32.1)	59.4	(14.4)	412.1	352.7
2006 ^r	121.9	(32.6)	87.4	(23.4)	119.7	(32.0)	44.5	(11.9)	373.5	329.0
2007^p	132.2	(33.4)	89.7	(22.6)	119.9	(30.3)	54.5	(13.8)	396.3	341.8

^a Includes sales to government agencies and other public authorities for general or institutional purposes, classified as “other” sales by the American Gas Association.

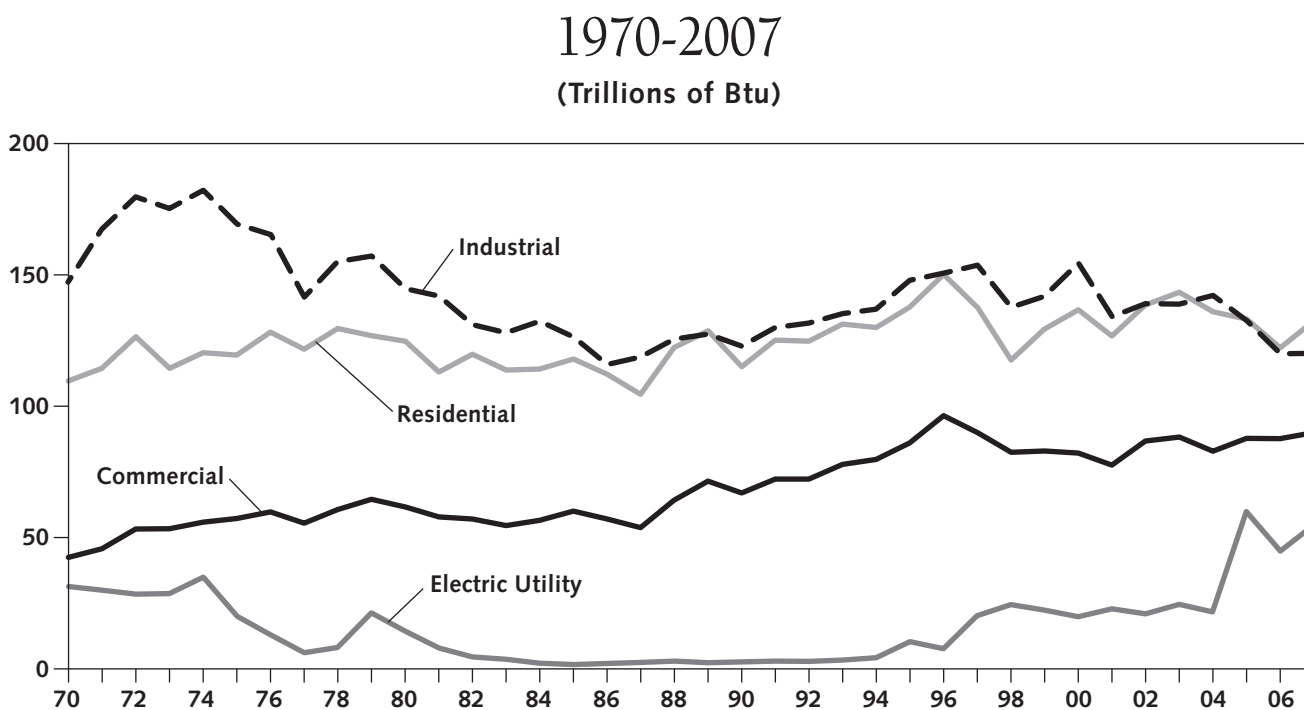
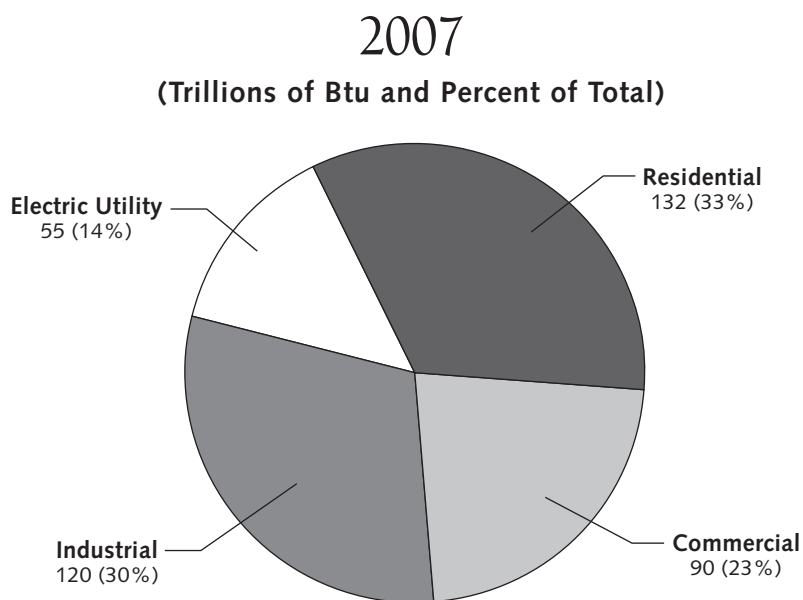
^b Includes gas used in electric power generation by utilities and independent power producers.

^p Preliminary estimates.

^r Revised using final annual data from the federal Energy Information Administration.

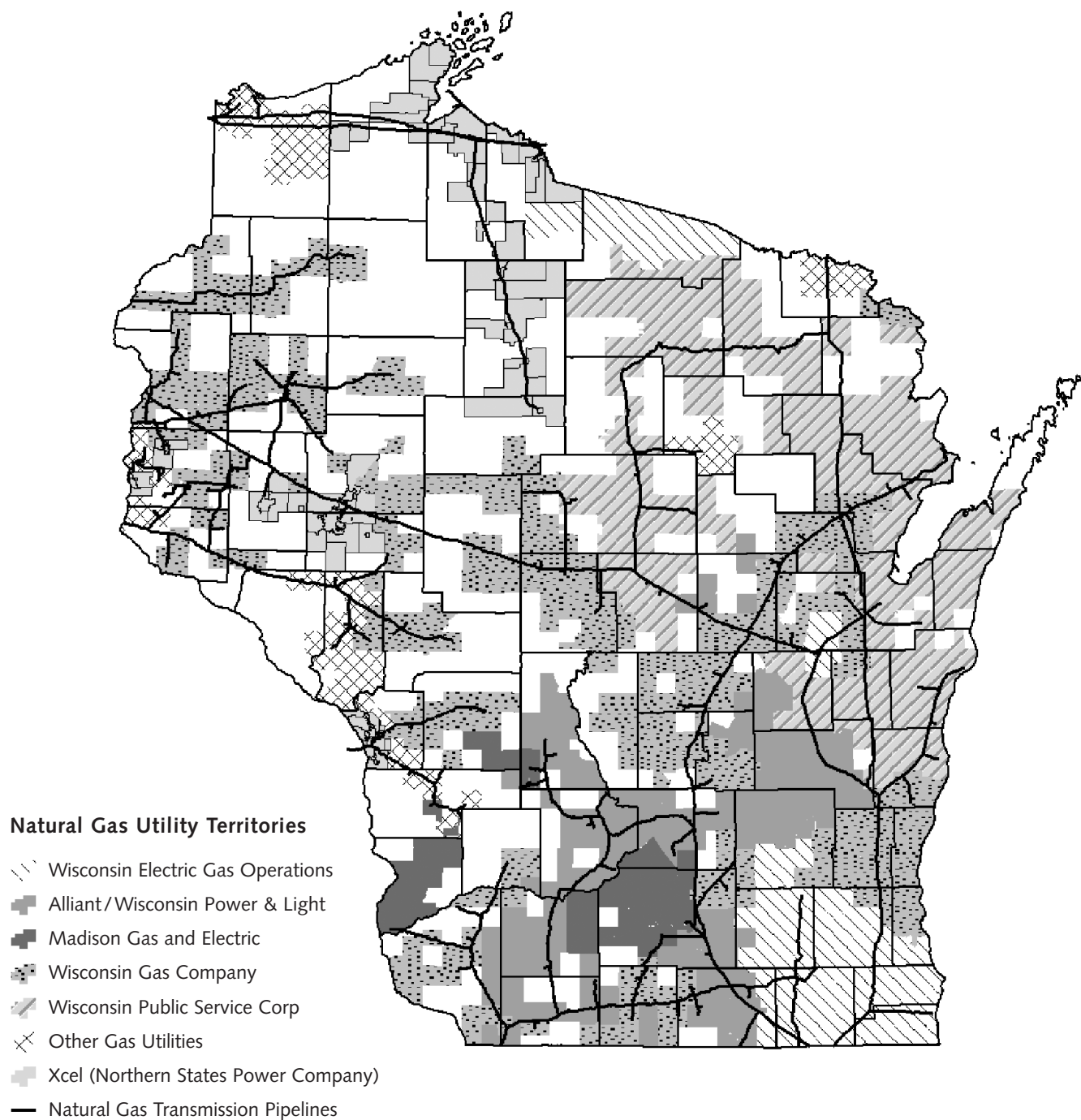
Source: American Gas Association, *Gas Facts* (1961-1997); Public Service Commission of Wisconsin, Accounts and Finance Division, *Statistics of Wisconsin Public Utilities*, Bulletin #8 (1963-1989), Public Service Commission of Wisconsin, *Operating Revenue and Expense Statistics: Class A and B Utilities in Wisconsin* (1990-1993), form PSC-AF 2 *Gas Sales and Sales Ratio* (1994-2007) and discussions with Public Service Commission staff; U.S. Department of Energy, *Natural Gas Annual, 1991-2005* [DOE/EIA-0131(07)] (October 2007) and *Natural Gas Monthly* [DOE/EIA-0130 (2008/06)] (June 2008).

Wisconsin Natural Gas Use, by Economic Sector



Source: Wisconsin Office of Energy Independence.

Wisconsin Natural Gas Company Territories & Major Pipelines



Source: Public Service Commission of Wisconsin.

Wisconsin Natural Gas Sales, by Public Service Commission of Wisconsin Sector, 1970-2007 (Trillions of Btu)

In 2007, natural gas use for residential and non residential space heating increased. Because of its lower cost, transport gas continues to be the preferred method of large commercial and industrial users for purchasing natural gas. These large users purchase the gas directly from the producers and have the interstate pipelines and local distribution companies transport this gas through their pipeline system for a fee.

Firm natural gas service guarantees no interruptions while *interruptible* service permits interruption on short notice, generally in peak-load seasons. Natural gas classified under “general” is used for applications other than heating, such as running gas appliances like a stove, dryer or water heater.

Year	Residential General	Residential Heating	Commercial, Industrial & Firm ^a	Commercial, Industrial & Interruptible ^b	Commercial, Industrial & Electric Heating	Total to Ultimate Utility Customers	Commercial, Industrial & Electric Transport Gas	Total Sold and Used ^d
1970	7.6	101.3	27.4	121.9	47.6	324.0	0.0	324.7
1975	6.8	112.4	36.6	135.2	60.6	362.9	0.0	363.7
1980	4.8	119.4	51.9	94.6	67.7	343.5	0.0	344.1
1985	2.8	115.1	35.3	85.3	67.1	306.7	0.0	307.3
1990	2.1	111.9	18.4	33.3	61.2	228.4	75.1	303.5
1995	1.8	135.7	20.4	50.8	79.2	287.9	93.2	381.1
2000	1.6	134.7	6.4	24.1	77.3	244.1	147.9	392.0
2001	1.4	125.0	7.0	23.4	70.0	226.8	133.3	360.1
2002	1.4	136.9	9.1	25.4	73.3	246.1	138.2	384.3
2003	1.5	141.6	9.9	25.3	79.6	257.9	136.1	394.0
2004	1.5	134.3	10.1	24.0	73.5	243.4	138.2	381.6
2005	1.4	131.5	9.2	39.4	73.3	254.8	157.3	412.1
2006 ^r	1.4	120.5	8.6	27.3	70.6	228.4	146.6	375.0
2007 ^{p,e}	1.6	130.6	9.7	29.2	76.8	247.9	159.7	407.6

^a Firm service guarantees no interruptions.

^b Interruptible service permits interruption on short notice, generally in peak-load seasons.

^d Includes gas used by the gas utility and transport gas.

^e Totals given here may differ from other tables due to different sources.

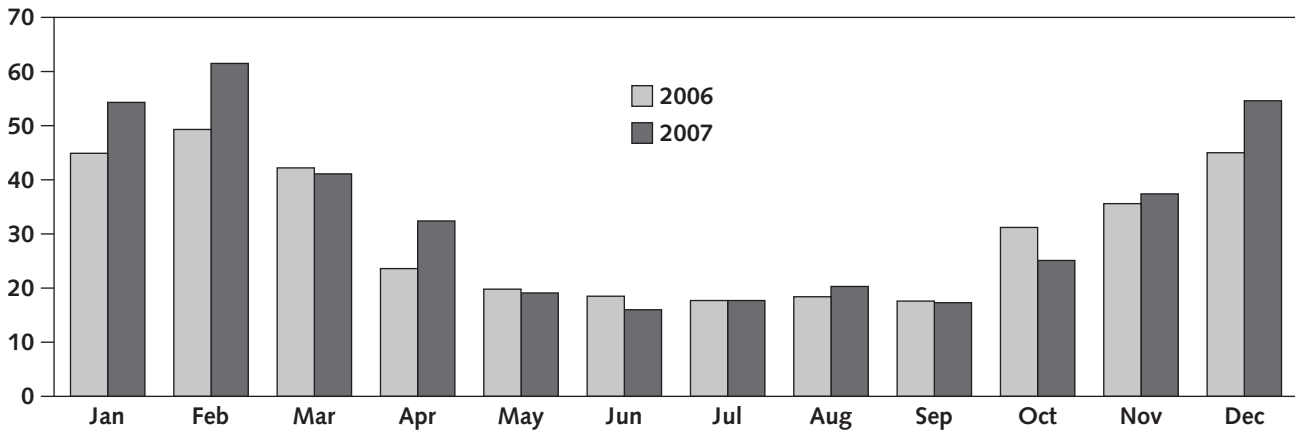
^p Preliminary estimates.

^r Revised

Source: Public Service Commission of Wisconsin, Accounts and Finance Division, *Statistics of Wisconsin Public Utilities*, Bulletin #8 (1963-1989), *Operating Revenue and Expense Statistics: Class A and B Utilities in Wisconsin* (1990-1993), and form PSC-AF 2 (1994-2007); U.S. Department of Energy, *Natural Gas Annual, 1991-2006* [DOE/EIA-0131(07)] (October 2007), and *Natural Gas Monthly* [DOE/EIA-0130 (2008/06)] (June 2008).

Wisconsin Natural Gas Sales, by Month 2006-2007 (Trillions of Btu)

In 2007, cold weather during the winter heating season months led to a 9.1 percent increase in natural gas use compared to 2006.



1976-2007 (Trillions of Btu)

Month	1976	1980	1985	1990	1995	2000	2002	2003	2004	2005	2006	2007
January	50.9	52.8	51.3	40.6	52.7	60.1	50.2	63.5	65.4	60.2	44.9	54.3
February	40.3	47.3	42.3	39.3	48.7	47.1	44.1	56.0	48.9	45.7	49.3	61.5
March	38.5	42.9	32.2	34.3	39.1	37.7	49.2	45.3	41.2	48.3	42.2	41.1
April	26.5	27.4	21.2	25.2	32.9	32.0	31.8	32.2	27.6	28.8	23.6	32.4
May	22.3	17.6	14.4	18.9	20.0	21.6	24.2	20.7	21.3	22.8	19.8	19.1
June	16.0	14.1	11.2	12.7	15.5	15.9	16.0	15.6	14.8	21.2	18.5	16.0
July	14.6	13.4	11.1	11.5	15.2	15.6	16.7	15.5	15.1	20.2	17.7	17.7
August	15.8	13.5	11.7	12.8	17.6	18.0	16.3	17.3	14.8	21.0	18.4	20.3
September	16.3	14.8	13.1	14.1	16.9	17.6	17.5	16.7	15.5	18.4	17.6	17.3
October	27.4	25.9	18.7	22.7	25.2	24.2	29.8	25.4	23.1	24.0	31.2	25.1
November	38.9	32.2	31.2	30.3	44.7	40.6	40.7	38.0	33.4	35.8	35.6	37.4
December	51.3	46.3	48.6	44.3	54.5	63.7	50.5	48.6	56.6	55.1	45.0	54.6
Total^a	358.8	348.2	306.9	306.9	383.0	394.1	387.0	394.8	377.7	401.5	363.8	396.8

^a Totals given here may differ from other tables due to different sources.

Source: Wisconsin natural gas utility monthly reports submitted to the Public Service Commission of Wisconsin (1976-2007).

Annual Average Number of Natural Gas Customers in Wisconsin, by Public Service Commission of Wisconsin Sector 1970-2007^a

Wisconsin gas utilities added 16,813 new customers in 2007 due to new construction and conversion from other fuels such as oil and LPG. The total number of gas customers grew 26 percent since 1995.

Year	Residential		Commercial, Industrial & Electric			Total
	General	Space Heating	Firm	Interruptible	Space Heating	
1970	183,695	566,676	13,806	3,104	50,783	818,064
1975	157,684	700,766	11,685	3,716	65,666	939,517
1980	119,492	830,709	10,781	1,478	76,673	1,039,133
1985	90,433	920,308	8,599	1,935	86,978	1,108,253
1990	77,687	1,041,103	8,193	1,394	102,336	1,230,713
1995	61,900	1,229,524	7,722	1,426	122,276	1,422,848
2000	54,700	1,403,301	7,100	1,021	139,000	1,605,122
2001	51,500	1,433,036	7,500	1,240	142,848	1,636,124
2002	49,200	1,465,500	8,200	1,370	147,404	1,671,674
2003	48,900	1,492,555	8,290	1,400	148,167	1,699,312
2004	48,300	1,521,419	8,950	1,400	149,500	1,729,569
2005	45,560	1,547,061	7,665	1,290	152,129	1,753,705
2006 ^r	45,450	1,566,322	6,781	1,260	155,000	1,774,813
2007 ^p	45,950	1,580,636	6,880	1,220	156,940	1,791,626

^a Because the number of customers varies from month to month, these averages are the total of all monthly customers for the year, divided by twelve.

^p Preliminary estimates.

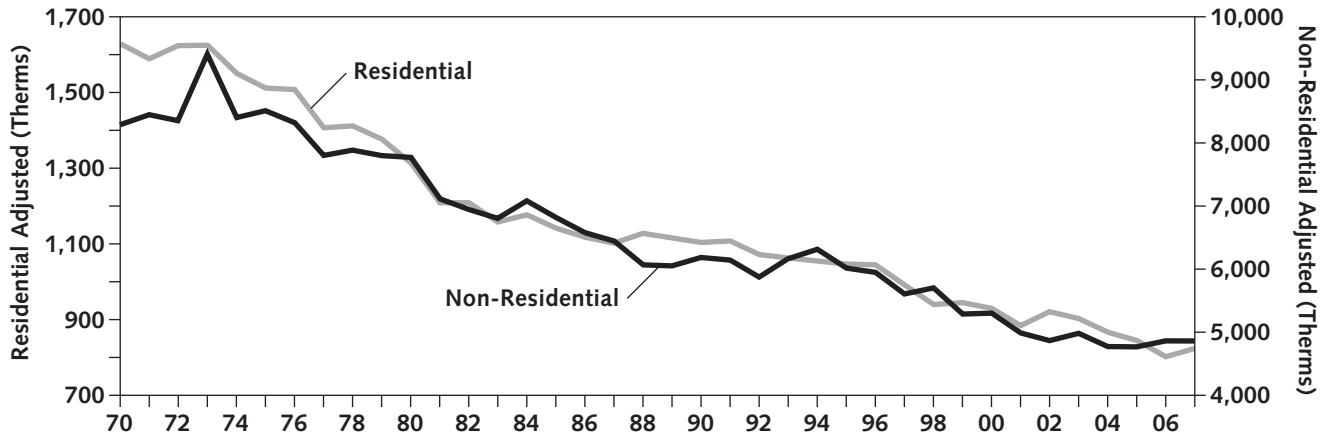
^r Revised.

Source: Public Service Commission of Wisconsin, Accounts and Finance Division, *Statistics of Wisconsin Public Utilities*, Bulletin #8 (1963-1989), *Operating Revenue and Expense Statistics: Class A and B Utilities in Wisconsin* (1990-1993), and form PSC-AF 2 *Gas Sales and Sales Ratio (1994-2007)*; U.S. Department of Energy, *Natural Gas Annual, 1991-2005* [DOE/EIA-0131(07)] (October 2007).

Wisconsin Natural Gas Sales Per Customer, by Public Service Commission of Wisconsin Sector, 1970-2007

(Therms Per Customer)

Natural gas use for residential space heating, adjusted for weather conditions, decreased 6.1 percent in 2007.



Year	Residential			Commercial, Industrial & Electric			
	General	Space Heating Actual	Space Heating Adjusted ^a	Firm	Interruptible	Space Heating Actual	Space Heating Adjusted ^a
1970	412	1,788	1,627	19,852	393,886	9,377	8,278
1975	432	1,603	1,510	31,297	364,846	9,234	8,500
1980	406	1,437	1,312	48,158	644,076	8,829	7,761
1985	311	1,250	1,140	41,035	442,442	7,712	6,808
1990	274	1,075	1,102	22,429	240,166	5,976	6,174
1995	291	1,104	1,045	26,418	356,241	6,477	6,006
2000	293	960	928	9,014	236,043	5,561	5,292
2005	307	850	843	12,003	305,426	4,818	4,757
2006	299	769	800	12,682	216,667	4,555	4,852
2007 ^P	346	826	822	14,099	239,344	4,894	4,850

^a Space heating categories adjusted to reflect demand under average heating degree days. In the residential category, an estimate of non-space heating gas use (general) was subtracted from each annual figure before adjusting. In the commercial category, the space heating use was adjusted without a non-space heating adjustment.

^P Preliminary estimates.

Source: Public Service Commission of Wisconsin, *Statistics of Wisconsin Public Utilities*, Bulletin #8 (1963-1989), *Operating Revenue and Expense Statistics: Class A and B Utilities in Wisconsin* (1991-1993), and form PSC-AF 2 (1994-2007).

Wisconsin Natural Gas Deliveries, by Pipeline Company 1970-2007

(Trillions of Btu and Percent of Total)

The major supplier of natural gas to Wisconsin, ANR, transports most of its gas from Oklahoma and Louisiana. Northern Natural Gas Company transports its gas to Wisconsin from Texas, Oklahoma, Kansas and Alberta, Canada. Natural Gas Pipeline Company transports gas to Wisconsin primarily from Oklahoma, Louisiana and Texas. However, Viking Gas Transmission Company's gas originates primarily from Alberta, Canada. Guardian Pipeline began transporting natural gas to Wisconsin on December 7, 2002.

Year	ANR Pipeline Co. ^a		Viking Gas Trans. Co. ^b		Natural Gas Pipeline Co. ^c		Northern Natural Gas Co. Corp.		Guardian Pipeline ^d		Total ^{e,f}
1970	289.4	(88.2%)	6.0	(1.8%)	6.3	(1.9%)	26.6	(8.1%)			328.3
1975	323.0	(88.5)	5.7	(1.6)	7.1	(1.9)	29.2	(8.0)			365.0
1980	305.5	(88.8)	3.9	(1.1)	7.8	(2.3)	26.8	(7.8)			344.0
1985	265.8	(87.4)	1.2	(0.4)	7.7	(2.5)	29.4	(9.7)			304.1
1990	218.2	(72.0)	6.0	(2.0)	7.4	(2.4)	53.8	(17.7)			303.2
1995	264.3	(69.6)	9.1	(2.4)	23.5	(6.2)	83.1	(21.9)			380.0
2000	272.1	(69.0)	11.1	(2.8)	21.0	(5.3)	90.0	(22.8)			394.2
2001	236.4	(66.0)	14.1	(3.9)	23.7	(6.6)	84.1	(23.5)			358.3
2002	267.2	(68.7)	15.1	(3.9)	22.3	(5.7)	82.5	(21.2)	1.9	(0.5)	389.0
2003	257.0	(64.6)	16.0	(4.0)	19.9	(5.0)	84.8	(21.3)	20.3	(5.1)	398.0
2004	241.8	(60.5)	14.8	(3.7)	19.8	(5.0)	82.3	(20.6)	40.8	(10.2)	399.5
2005	253.2	(61.2)	16.1	(3.9)	19.6	(4.7)	82.3	(19.9)	42.9	(10.4)	414.0
2006	219.0	(57.5)	14.6	(3.8)	19.9	(5.2)	86.8	(22.8)	40.6	(10.7)	380.9
2007 ^p	249.9	(59.2)	18.8	(4.4)	18.0	(4.3)	86.5	(20.5)	48.9	(11.6)	422.1

^a Formerly American Natural Resources Pipeline Co.

^b Formerly Midwest Gas Transmission Co.

^c In 1994, Midcon Corporation became part of the Natural Gas Pipeline Co. Prior to 1994, data in this table included delivery information from Midcon Corporation.

^d The Guardian Pipeline became operational on December 7, 2002.

^e Total purchases differ from the total sold and used by gas utilities due to inventory changes, utility production from liquefied petroleum gas and some unaccounted gas.

^f Prior to 1990, deliveries represent utility gas sales. Beginning in 1990, deliveries represent total gas used in Wisconsin, including both utility and transported gas deliveries.

^p Preliminary.

Source: Public Service Commission of Wisconsin, Accounts and Finance Division, *Statistics of Wisconsin Public Utilities*, Bulletin #8 (1970-1993). Telephone conversations with pipeline representatives 1991-2007.

Wisconsin Coal Use, in Btu, by Economic Sector 1970-2007^r

(Trillions of Btu and Percent of Total)

Wisconsin's total coal consumption increased 0.3 percent in 2007. More than 90 percent of Wisconsin coal imports are used by electric utilities. Wisconsin coal use has almost doubled since 1975. Industrial coal consumption decreased 0.9 percent in 2007. Commercial sector use of coal is limited primarily to state facilities and large institutions. Residential coal use is limited to fewer than 300 residences and some older residential facilities, such as apartments.

Year	Residential		Commercial		Industrial		Electric Utility ^a		Total	Total End Use
1970	9.5	(2.7%)	17.7	(5.0%)	97.1	(27.3%)	231.1	(65.0%)	355.4	124.3
1975	3.8	(1.4)	7.1	(2.7)	40.9	(15.6)	210.5	(80.3)	262.3	51.8
1980	2.3	(0.7)	4.4	(1.4)	47.2	(14.5)	270.7	(83.4)	324.6	53.9
1985	0.9	(0.2)	4.4	(1.2)	51.4	(13.7)	317.7	(84.9)	374.4	56.7
1990	0.4	(0.1)	4.5	(1.1)	51.9	(12.6)	354.5	(86.2)	411.4	56.9
1995	0.3	(0.1)	3.8	(0.8)	47.2	(10.2)	412.4	(88.9)	463.7	51.3
2000	0.2	(0.0)	4.8	(0.9)	43.0	(8.3)	471.4	(90.8)	519.4	48.0
2001	0.2	(0.0)	4.8	(0.9)	45.3	(8.7)	471.6	(90.4)	521.9	50.3
2002	0.2	(0.0)	4.5	(0.9)	46.7	(9.2)	457.1	(89.9)	508.5	51.3
2003	0.2	(0.0)	4.7	(0.9)	45.6	(8.7)	476.6	(90.4)	527.0	50.5
2004	0.1	(0.0)	4.8	(0.9)	47.0	(8.7)	485.2	(90.3)	537.0	51.9
2005	0.1	(0.0)	4.8	(0.9)	45.1	(8.5)	481.7	(90.6)	531.7	50.0
2006	0.1	(0.0)	4.8	(0.9)	46.7	(9.1)	463.0	(90.0)	514.6	51.6
2007 ^p	0.1	(0.0)	4.8	(0.9)	46.3	(9.0)	464.7	(90.1)	515.9	51.2

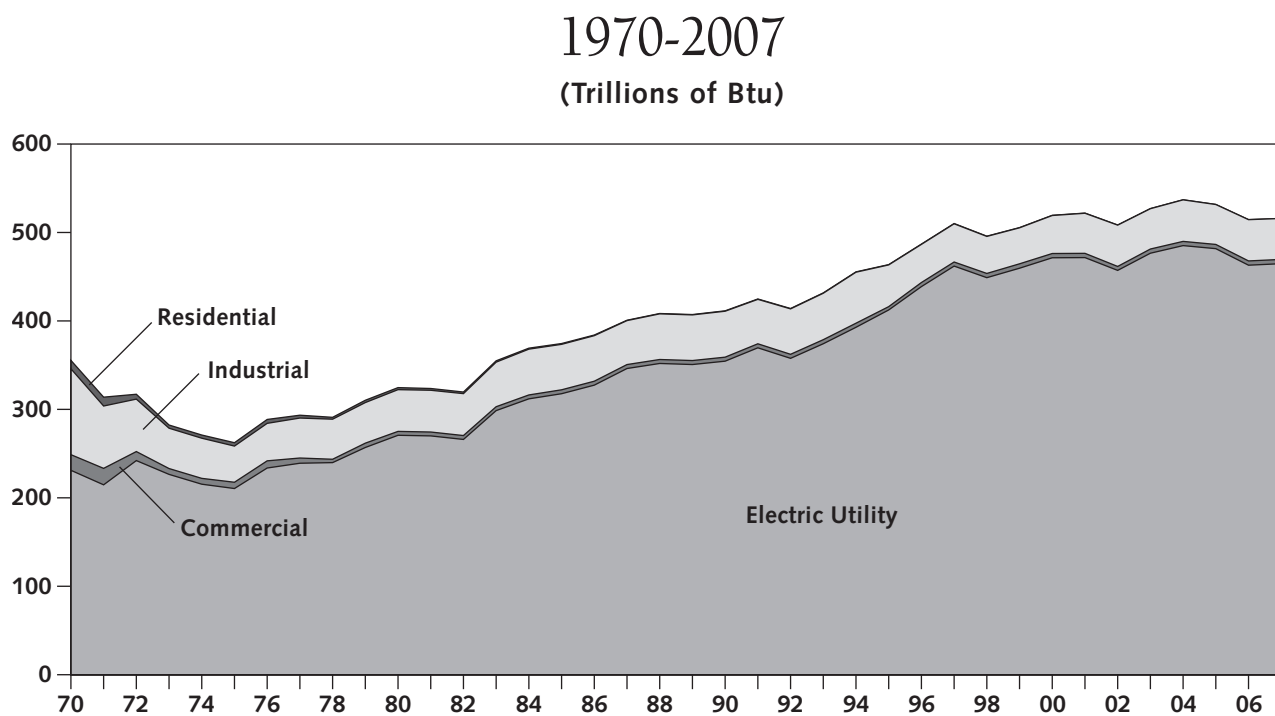
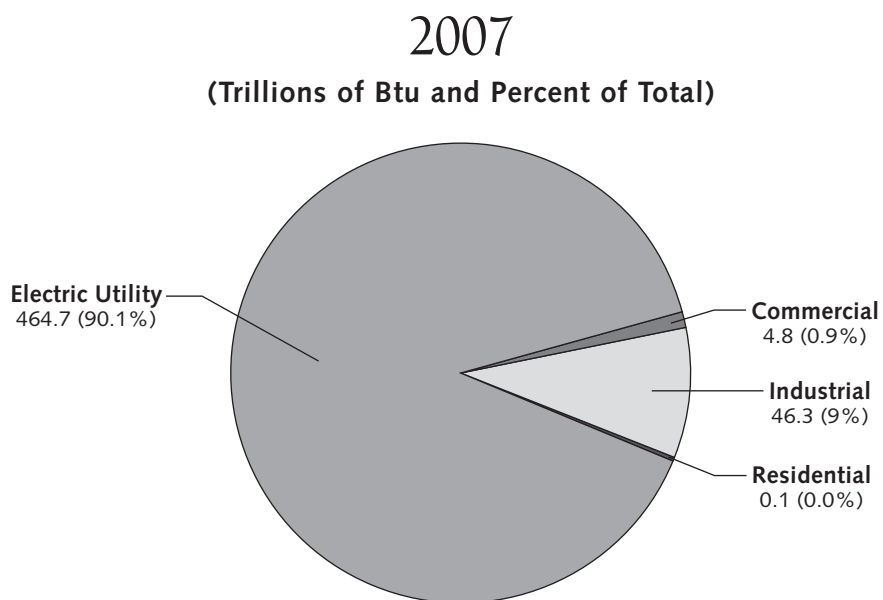
^a Includes petroleum coke co-fired with coal.

^p Preliminary estimates.

^r Revised.

Source: U.S. Department of Energy, Energy Information Administration, *State Energy Data Report*, [DOE/EIA-0214(94)] (October 1996), and *Coal Distribution* [DOE/EIA-0125 (95/4Q)] (1980-1995); Wisconsin Department of Natural Resources, Annual Survey of Point Source Emissions, unpublished (1971-2006); annual reports of various Wisconsin electric generating utilities (1995-2007); U.S. Department of Commerce, Bureau of the Census of Housing (1970, 1980, 1990 and 2000).

Wisconsin Coal Use, by Economic Sector



Source: Wisconsin Office of Energy Independence.

Wisconsin Coal Use, in Tons, by Economic Sector 1970-2007^r

(Thousands of Tons and Percent of Total)

The total weight of coal used in Wisconsin increased 72 tons (0.3 percent) in 2007.

Year	Residential		Commercial		Industrial		Electric Utility ^a		Total
1970	453	(2.9%)	840	(5.4%)	3,870	(25.0%)	10,294	(66.6%)	15,457
1975	202	(1.7)	375	(3.1)	1,716	(14.2)	9,776	(81.0)	12,069
1980	113	(0.7)	210	(1.3)	2,001	(12.5)	13,715	(85.5)	16,039
1985	40	(0.2)	211	(1.1)	2,176	(11.7)	16,208	(87.0)	18,635
1990	20	(0.1)	216	(1.1)	2,200	(10.7)	18,087	(88.1)	20,523
1995	15	(0.1)	179	(0.8)	1,998	(8.6)	21,042	(90.6)	23,234
2000	10	(0.0)	230	(0.9)	1,820	(7.0)	24,050	(92.1)	26,110
2001	9	(0.0)	229	(0.9)	1,919	(7.3)	24,062	(91.8)	26,219
2002	8	(0.0)	213	(0.8)	1,978	(7.8)	23,323	(91.4)	25,522
2003	7	(0.0)	226	(0.9)	1,931	(7.3)	24,314	(91.8)	26,478
2004	6	(0.0)	227	(0.8)	1,989	(7.4)	24,753	(91.8)	26,975
2005	5	(0.0)	228	(0.9)	1,911	(7.2)	24,577	(92.0)	26,721
2006	4	(0.0)	230	(0.9)	1,976	(7.6)	23,623	(91.4)	25,833
2007^p	4	(0.0)	230	(0.9)	1,960	(7.6)	23,711	(91.5)	25,905

^a Includes petroleum coke co-fired with coal.

^p Preliminary estimates.

^r Revised.

Source: U.S. Department of Energy, Energy Information Administration, *State Energy Data Report* [DOE/EIA-0214(94)] (October 1996); U.S. Department of Commerce, Bureau of Census, *Census of Manufacturers* and *Annual Survey of Manufacturers, Fuels and Electric Energy Consumed* (1971-1982); Wisconsin Department of Natural Resources, Annual Survey of Point Source Emissions, unpublished (1971-2006); annual reports of various Wisconsin electric generating utilities (1995-2007); U.S. Department of Commerce, Bureau of the Census of Housing (1970, 1980, 1990 and 2000); http://www.eia.doe.gov/cneaf/electricity/epa/epa_sprdshts.html.

Wisconsin Electric Utility Coal Use, by Plant 1975-2007

(Thousands of Tons)

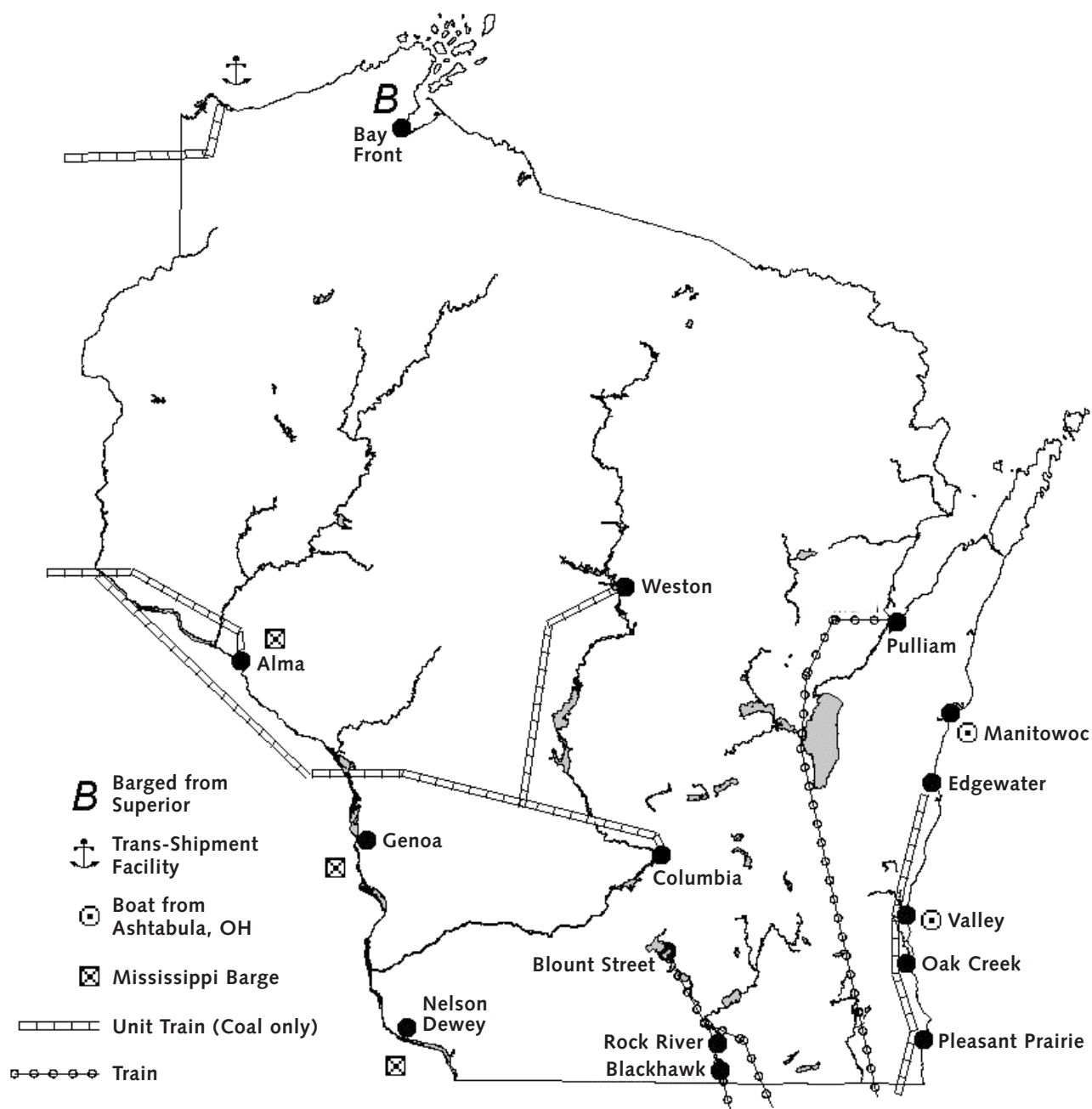
Coal use by Wisconsin's electric utilities increased only 0.4 percent in 2007 requiring additional imports of electricity to supply Wisconsin's increased sales of electricity. The two largest power plants, Pleasant Prairie and Columbia, used 40 percent of the utility coal burned in Wisconsin.

Utility/Plant Name	1975	1980	1985	1990	1995	2000	2005	2006	2007
Dairyland Power Cooperative									
Alma	502	1,188	1,268	1,506	1,231	1,754	2,031	1,750	1,957
Genoa	801	915	914	680	788	928	1,172	1,200	1,175
Stoneman	111	74	44	30	0	0	38	35	25
Madison Gas and Electric Co.									
Blount Street	77	144	61	95	137	215	228	250	116
Northern States Power Co.									
Bay Front	52	100	36	45	30	115	152	150	140
Wisconsin Public Service Corp.									
Pulliam	753	744	489	674	1,130	1,444	1,627	1,650	1,599
Weston	239	329	1,275	1,555	1,702	1,972	2,143	1,900	1,704
Wisconsin Electric Power Co.									
Oak Creek	2,873	2,542	2,528	1,522	2,093	3,410	3,255	3,300	3,238
Pleasant Prairie	0	581	2,564	4,703	5,073	5,295	5,373	5,200	5,031
Port Washington	691	683	348	126	430	641	0	0	0
Valley	536	774	528	463	458	690	780	800	703
Wisconsin Power and Light Co.									
Blackhawk	24	30	8	0	0	0	0	0	0
Columbia	1,025	3,603	2,991	3,665	4,238	4,355	4,370	4,200	4,456
Edgewater	976	1,056	2,112	2,180	2,702	2,531	2,533	2,400	2,810
Nelson Dewey	512	552	541	497	615	580	729	700	657
Rock River	293	245	317	198	253	2	0	0	0
Municipal Utilities									
Manitowoc ^a	142	67	91	116	160	108	140	83	100
Marshfield	90	40	48	7	0	0	0	0	0
Menasha	58	28	25	25	2	10	6	5	0
Richland Center	21	20	20	0	0	0	0	0	0
Total	9,776	13,715	16,208	18,087	21,042	24,050	24,577	23,623	23,711

^a Includes petroleum coke co-fired with coal.

Source: Wisconsin Department of Natural Resources, Annual Survey of Point Source Emissions, unpublished (1975-1994); annual reports of various Wisconsin electric generating utilities (1995-2007); U.S. Department of Energy, *Electric Power Monthly* [DOE/EIA-0226 (2008/03)](March 2008).

Coal Transportation Routes in Wisconsin and Major Coal-Fired Power Plants, 2007



Source: Wisconsin Office of Energy Independence.

Wisconsin Manufacturing Industry Coal Purchases, by Industry Group, 1971-2007

(Thousands of Tons)

Wisconsin's industrial coal use continues to be dominated by paper and allied products, which consumed nearly 93 percent of the industrial coal used in 2007.

SIC Industry Group	1971	1975	1980	1985	1990	1995 ^r	2000 ^r	2005 ^r	2006 ^r	2007 ^b
20 Food and Kindred	213	56	64	72	43	10	15	21	20	20
24 Lumber	17	3	2	2	—	—	—	—	—	—
25 Furniture	2	— ^a	—	—	—	—	—	—	—	—
26 Paper and Allied	1,940	1,469	1,737	1,878	1,863	1,825	1,700	1,765	1,833	1,825
28 Chemicals	174	6	—	—	—	—	—	—	—	—
30 Rubber	48	39	31	27	22	—	—	—	—	—
31 Leather	3	1	2	—	—	—	—	—	—	—
32 Stone, Clay and Glass	79	13	8	49	116	120	80	121	116	110
33 Primary Metals	114	50	80	66	95	—	—	—	—	—
34 Fabricated Metals	27	—	—	—	—	—	—	—	—	—
35 Machinery	67	31	38	37	23	14	—	—	—	—
36 Electrical Equipment	17	1	—	—	—	—	—	—	—	—
37 Transport Equipment	107	35	30	37	32	22	12	4	6	5
39 Miscellaneous	3	2	8	8	6	8	—	—	—	—
Total Manufacturing	2,810	1,716	2,001	2,176	2,200	1,998	1,820	1,911	1,976	1,960

^a Fewer than 500 tons.

^b Estimated.

^r Revised.

Source: U.S. Department of Commerce, Bureau of the Census, *Census of Manufacturers, and Annual Survey of Manufacturers* (1972-1981); U.S. Department of Energy, Energy Information Administration, *Coal Distribution* [DOE/EIA-0125 (95/4Q)] (1980-1995); Wisconsin Department of Natural Resources, Annual Survey of Point Source Emissions, unpublished (1972-2007).

Coal Deliveries to Wisconsin, by Transportation Mode and Type of Receiving Facility, 1975-2007^a

(Thousands of Tons)

Coal shipped by rail increased 4.0 percent in 2007 as total coal deliveries increased 4.2 percent. Nearly 92 percent of coal is delivered to Wisconsin by rail. The long term increase in coal tonnage shipped by rail reflects the increased use of low sulfur western coal. Use of low sulfur eastern coal shipped by the Great Lakes, and midwest coal shipped by river barge, is expected to continue at near current levels. Increases in Wisconsin coal deliveries will be concentrated in rail deliveries of western coal for electric utilities.

Transportation Mode and Type of Receiving Facility	1975	1980	1985	1990	1995	2000	2005	2006	2007 ^P
Rail									
Electric Utilities	7,631	11,140	13,194	17,237	18,815	25,072	21,722	25,181	26,150
Coke Plants	29	11	0	0	0	0	0	0	0
Other Industrial	850	1,047	846	811	772	1,169	1,177	1,441	1,510
Residential/Commercial	170	3	5	1	3	33	417	28	50
Subtotal	8,680	12,201	14,045	18,049	19,590	26,274	23,316	26,650	27,710
Great Lakes Shipping									
Electric Utilities	2,211	1,713	1,118	429	1,005	753	1,572	1,483	1,500
Coke Plants	224	167	0	0	0	0	0	0	0
Other Industrial	992	981	1,024	822	788	331	46	6	50
Residential/Commercial	212	46	11	1	0	0	0	0	0
Subtotal	3,639	2,907	2,153	1,252	1,793	1,084	1,618	1,489	1,550
River Barge									
Electric Utilities	1,756	1,487	1,042	855	1,083	32	1,508	401	500
Other Industrial	0	62	246	55	120	4	22	6	40
Residential/Commercial	0	1	10	2	126	129	0	0	0
Subtotal	1,756	1,550	1,298	912	1,329	165	1,530	407	540
Truck									
Electric Utilities	0	0	2	31	0	0	0	144	115
Other Industrial	0	1	45	1	53	5	488	359	350
Residential/Commercial	0	0	0	0	0	0	1	1	0
Subtotal	0	1	47	32	53	5	489	504	465
Total^a	14,075	16,658	17,544	20,245	22,766	27,528	26,953	29,050	30,265

^a Total data reported in this table may differ from other tables because of different sources.

^P Preliminary

Source: U.S. Bureau of Mines, "Bituminous Coal and Lignite Distribution", *Mineral Industry Surveys* (1973-1976); U.S. Department of Energy, Energy Information Administration, *Bituminous and Subbituminous Coal and Lignite Distribution* (1977-1979), *Coal Industry Annual* [DOE/EIA - 0584] (2000), *Coal Distribution* [DOE/EIA-0125 (99/4Q)] (1980-1999) and *Quarterly Coal Report* [DOA/EIA-0121 (2008/4Q)] (March 2008), http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/coal_distributions.html.

Coal Deliveries to Wisconsin Industries, by Region of Origin^a 1975-2007

(Thousands of Tons)

Coal currently used by Wisconsin industry comes primarily from the western part of the country (42.4 percent). There has been a gradual decline in industrial coal use. Industrial coal from Illinois has declined 82 percent since 1985.

Origin	1975	1980	1985	1990	1995	2000	2002	2003	2004	2005	2006	2007 ^P
Eastern PA	39	136	24	4	5	8	10	8	7	137	152	160
Western PA	11	125	192	38	33	11	28	0	0	0	0	0
Northern WV	93	339	150	230	384	75	93	37	103	175	110	100
Ohio	91	129	43	0	10	0	14	0	59	36	18	10
Southern No. 1 (WV and VA)	35	88	2	1	15	190	265	85	24	13	4	5
Southern No. 2 (WV and KY)	1,210	497	757	628	529	326	315	169	158	243	248	250
Western KY	111	127	147	98	196	179	210	189	0	192	193	195
Illinois	515	520	624	300	228	147	148	159	94	101	107	110
Indiana	55	114	89	43	67	52	372	206	142	207	202	200
Western U.S.	11	3	0	0	0	0	0	0	0	0	0	0
CO and NM	0	0	0	0	0	0	10	0	208	190	326	320
Wyoming	24	16	0	346	250	521	356	462	373	368	424	410
Utah	1	0	0	0	0	0	0	127	22	71	27	29
MO and WA	281	220	158	0	15	0	6	0	0	0	0	0
Total	2,477	2,314	2,186	1,688	1,733	1,509	1,827	1,442	1,190	1,733	1,811	1,789

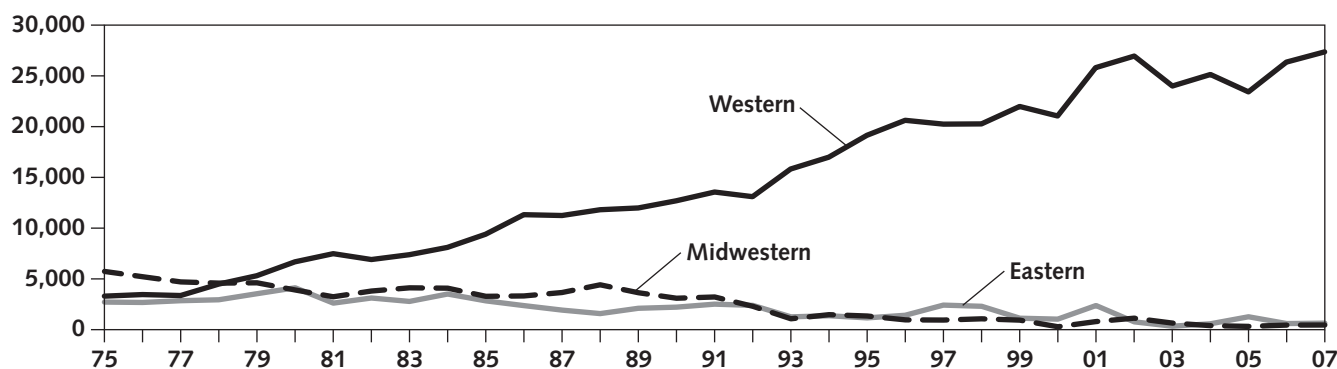
^a Includes shipments to Wisconsin end users and dealers. Does not include deliveries to Superior Midwest Energy Terminal for trans-shipment from Wisconsin.

^P Preliminary

Source: U.S. Bureau of Mines, "Bituminous Coal and Lignite Distribution", *Mineral Industry Surveys* (1973-1976); U.S. Department of Energy, Energy Information Administration, *Bituminous and Subbituminous Coal and Lignite Distribution* (1977-1979), *Coal Industry Annual* [DOE/EIA-0584] (2000), *Coal Distribution* [DOE/EIA-0125 (99/4Q)] (1980-1999), *Quarterly Coal Report* [DOE/EIA - 0121(2008/4Q)] (March 2008), http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/coal_distributions.html.

Coal Deliveries to Wisconsin Power Plants, by Region of Origin 1975-2007

(Thousands of Tons)



Coal Deliveries to Wisconsin Power Plants, by State of Origin 1975-2007^r

(Thousands of Tons)

Although utility power plant coal use increased 0.4 percent in 2007 (page 40), coal deliveries to Wisconsin power plants increased 3.9 percent. This resulted in an increase of coal stockpiled at Wisconsin utilities for future use.

State	1975	1980	1985	1990	1995	2000	2005	2006	2007 ^P
Eastern									
Kentucky	2,073	2,816	2,122	196	95	47	758	269	275
Pennsylvania	572	1,007	639	1,760	941	826	0	3	20
West Virginia	5	233	0	136	57	34	252	260	265
Other States	1	0	9	59	0	62	191	2	15
Subtotal	2,651	4,056	2,770	2,151	1,093	969	1,201	534	575
Midwestern									
Illinois	4,857	3,364	1,478	1,136	1,232	0	97	297	310
Indiana	785	205	1,731	1,893	46	221	159	84	80
Ohio	27	272	0	0	0	0	0	0	0
Other States	0	1	9	0	0	0	0	0	0
Subtotal	5,669	3,842	3,218	3,029	1,278	221	256	381	390
Western									
Montana	2,161	2,575	2,235	1,983	2,102	463	591	1,237	1,150
Wyoming	1,053	4,042	7,101	10,605	15,223	19,192	20,581	23,150	24,050
Other States	20	0	0	43	1,758	1,320	2,174	1,907	2,100
Subtotal	3,234	6,617	9,336	12,631	19,083	20,975	23,346	26,294	27,300
Total	11,554	14,515	15,324	17,811	21,454	22,164	24,803	27,209	28,265

^P Preliminary.

Source: U.S. Department of Energy, *Cost and Quality of Fuels for Electric Utility Plants 2000* [DOE/EIA-0191(2001)] (May 2001), and *Quarterly Coal Report* [DOE/EIA-0121 (2007/4Q)] (March 2008) and http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/coal_distributions.html.

^r Revised.

Wisconsin Electric Utility Sales, by Economic Sector 1970-2007

(Millions of kWh and Percent of Total)

Total electricity sales increased 2.2 percent in 2007 but have grown 18.8 percent over the past ten years. In 2007, electricity sales increased in the residential, commercial and industrial sectors.

Year	Residential		Commercial ^a		Industrial		Agricultural ^d		Total
1970	8,761	(35.4%)	5,738	(23.2%)	9,188	(37.2%)	1,028	(4.2%)	24,715
1975	10,893	(34.8)	8,452	(27.0)	10,721	(34.3)	1,210	(3.9)	31,276
1980	12,513	(33.2)	11,243	(29.8)	12,450	(33.0)	1,539	(4.1)	37,745
1985	13,257	(31.8)	12,783	(30.6)	13,940	(33.4)	1,745	(4.2)	41,725
1990 ^b	14,740	(30.0)	15,808	(32.1)	17,005	(34.6)	1,645	(3.3)	49,198
1995	17,040	(29.4)	18,042	(31.1)	21,290	(36.7)	1,595	(2.8)	57,967
2000	18,199	(28.1)	21,407	(33.1)	23,528	(36.4)	1,555	(2.4)	64,689
2005 ^c	20,877	(29.7)	22,501	(32.0)	25,377	(36.1)	1,581	(2.2)	70,336
2006	20,227	(29.0)	22,756	(32.6)	25,286	(36.2)	1,552	(2.2)	69,821
2007 ^p	21,061	(29.5)	23,465	(32.9)	25,443	(35.7)	1,398	(2.0)	71,367

^a Includes sales to public authorities (including sales for street and highway lighting) and utility company interdepartmental sales (for example, from electric to gas department of a combined utility).

^b Beginning in 1989, U.S. DOE data sources have been used.

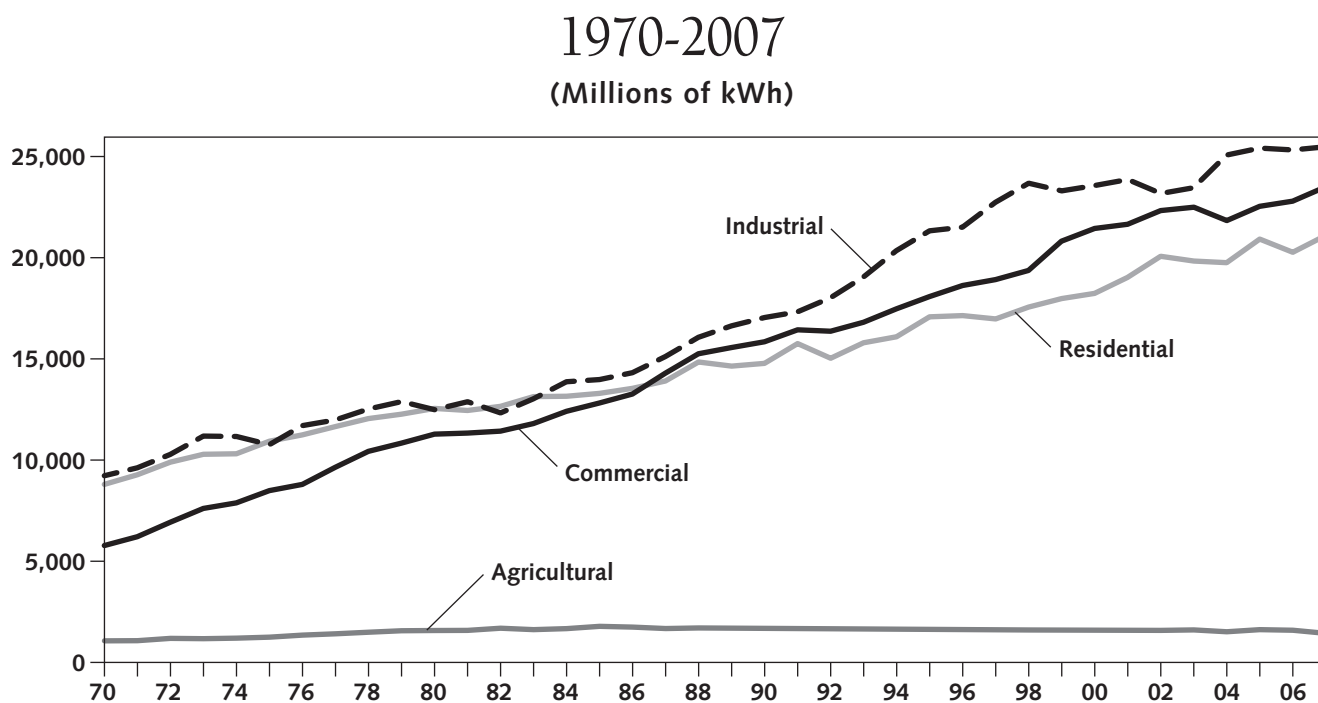
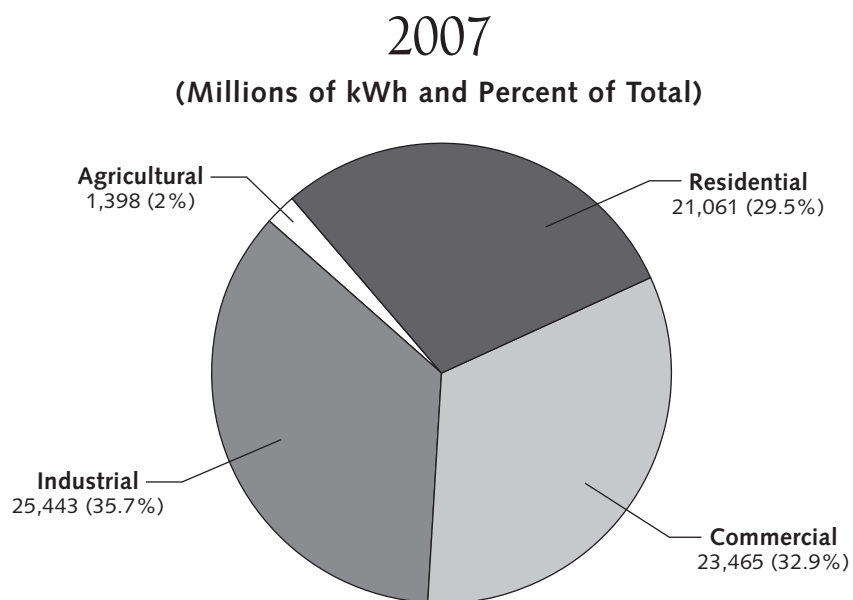
^c Beginning in 2005, USDA agricultural statistics were used to derive electricity sales to this sector. To accommodate this shift in data sources, numbers in the residential and agricultural sectors have been historically revised from 1989 to 2007.

^d The agricultural sector does not include processing plants for crops and other agricultural products; these are classified under the commercial sector.

^p Preliminary estimates.

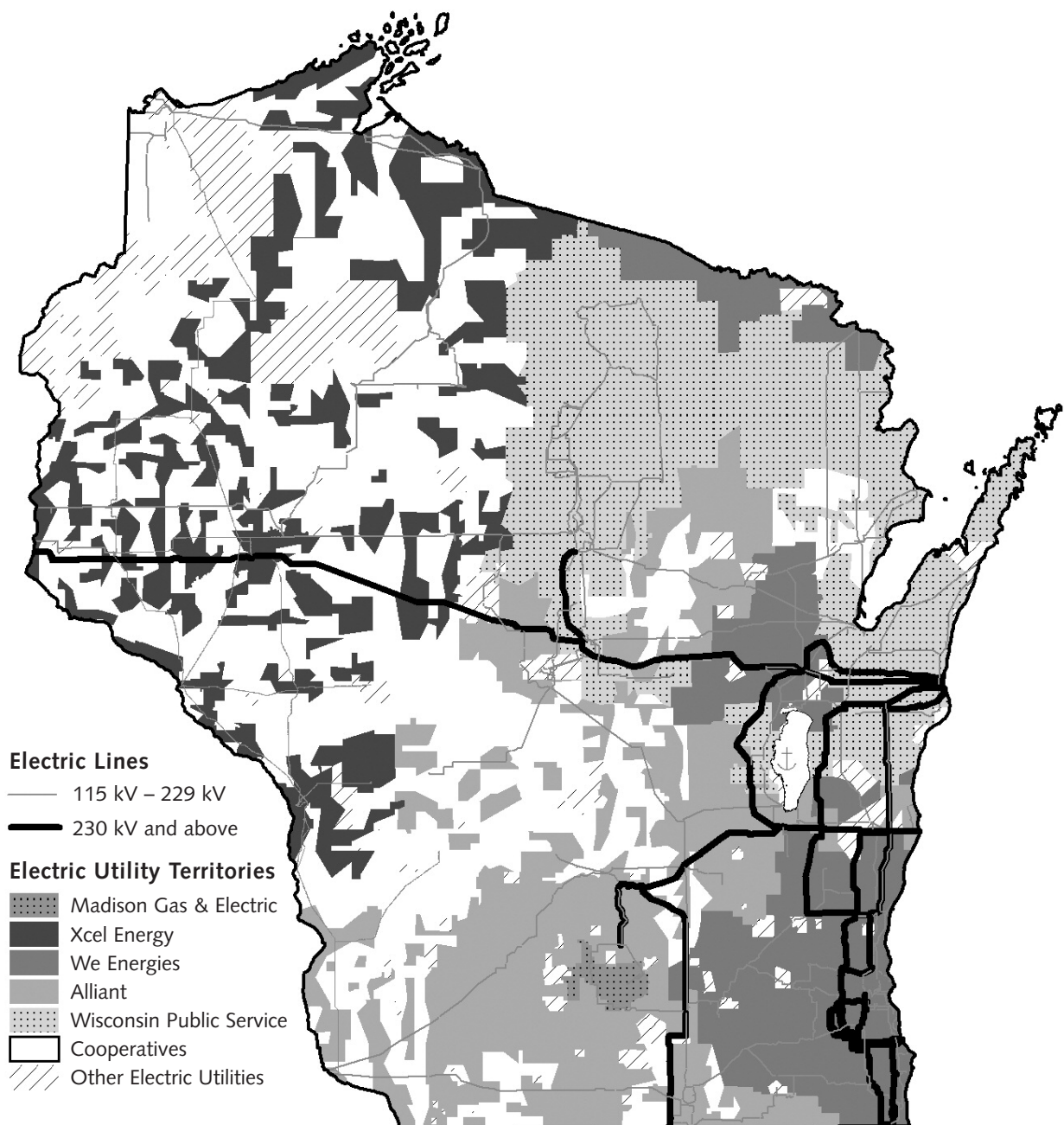
Source: Sectoral disaggregation by Wisconsin Office of Energy Independence, based on Public Service Commission of Wisconsin, *Statistics of Wisconsin Public Utilities*, Bulletin #8 (1970-1994); U.S. Department of Agriculture, Rural Electrification Administration, *Annual Statistical Report*, REA Bulletin 1-1 (1970-1994); U.S. Department of Energy, *Electric Sales and Revenue 1989-1999* [DOE/EIA-0540 (99)] (October 2000), *Electric Power Monthly* [DOE/EIA-0226 (2008/03)] (March 2008) (1989-2007). http://www.eia.doe.gov/cneaf/electricity/epm/epm_sum.html; U.S. Department of Agriculture, National Agriculture Statistics Service electricity expenditure data (2007).

Wisconsin Electric Utility Sales, by Economic Sector



Source: Wisconsin Office of Energy Independence.

Major Electric Lines and Service Territory Areas



Source: Wisconsin Department of Natural Resources, with permission from the Wisconsin Electric Power Company; and Wisconsin Office of Energy Independence.

Wisconsin Electricity Sales to Ultimate Customers, by Private and Municipal Utilities and Power Cooperatives, 1970-2007

(Millions of kWh and Percent of Total)

Investor owned utilities supply the vast majority of power to Wisconsin electricity customers. The relative amounts of power supplied by the three types of suppliers have changed very little over the past 20 years.

Year	Private Utilities		Municipal Utilities		Power Cooperatives		Total
1970	21,515	(87.1%)	2,160	(8.7%)	1,040	(4.2%)	24,715
1975	27,021	(86.4)	2,784	(8.9)	1,471	(4.7)	31,276
1980	32,335	(85.7)	3,547	(9.4)	1,864	(4.9)	37,746
1985	35,497	(85.1)	4,132	(9.9)	2,096	(5.0)	41,725
1990 ^a	41,653	(84.7)	5,263	(10.7)	2,282	(4.6)	49,198
1995	48,814	(84.2)	6,479	(11.2)	2,674	(4.6)	57,967
2000	54,404	(84.1)	7,375	(11.4)	2,910	(4.5)	64,689
2001	55,545	(84.2)	7,349	(11.1)	3,083	(4.7)	65,977
2002	56,250	(84.0)	7,523	(11.2)	3,226	(4.8)	66,999
2003	56,459	(84.0)	7,500	(11.2)	3,282	(4.9)	67,241
2004	57,099	(84.0)	7,598	(11.2)	3,279	(4.8)	67,976
2005	58,899	(83.7)	7,950	(11.3)	3,487	(5.0)	70,336
2006	58,407	(83.7)	7,904	(11.3)	3,510	(5.0)	69,821
2007^P	59,737	(83.7)	8,060	(11.3)	3,570	(5.0)	71,367

^a Beginning in 1989, U.S. DOE data sources have been used.

^P Preliminary estimates.

Source: Public Service Commission of Wisconsin, Accounts and Finance Division, *Statistics of Wisconsin Public Utilities*, Bulletin #8, Table 5 (1970-1994); U.S. Department of Agriculture, Rural Electrification Administration, *Annual Statistical Report*, REA Bulletin 1-1, Table 31 (1970-1994); U.S. Department of Energy, *Electric Sales and Revenue 1989-2000* [DOE/EIA-0540 (2000)] (November 2001), and *Electric Power Monthly* [DOE/EIA-0226 (2008/03)] (March 2008). www.eia.doe.gov/cneaf/electricity/epm/epm_sum.html

Eastern Wisconsin Electric Utility Power Load and Non-Coincident Peak Demand,^{a,b} 1970-2007

Wisconsin's 2007 summer peak electricity demand for the eastern Wisconsin utilities decreased 3.6 percent due to milder weather in July. The decrease compared to 2006 was 431 megawatts. Winter peak demand increased in 2007 due to colder December weather. Summer peak demand in 2007 exceeded winter peak demand by 2,540 megawatts.

Year	Load (Millions of kWh)	Peak Demand ^b		Load Factor ^c (Percent)
		Summer (MW)	Winter (MW)	
1970	22,818	4,125	3,964	63.1
1975	28,616	5,314	4,903	61.5
1980	34,836	6,009	5,525	66.0
1985	39,325	6,464	6,166	69.4
1990 ^d	47,381	8,326	7,210	65.0
1995	55,821	9,833	8,275	64.8
1996	58,408	9,061	8,285	73.4
1997	59,946	9,313	8,302	73.5
1998	59,563	10,099	8,644	67.3
1999	61,990	10,756	8,977	65.8
2000	64,084	10,814	9,152	67.6
2001	61,701	11,645	8,440	60.5
2002	67,698	11,401	8,917	67.8
2003	68,886	11,688	9,192	67.3
2004	68,296	10,981	9,729	70.8
2005	70,441	11,946	9,595	67.3
2006	67,216	12,129	9,000	63.3
2007^p	69,145	11,698	9,158	67.5

^a Wisconsin Electric Power Co., Wisconsin Power and Light Co., Wisconsin Public Service Corp., and Madison Gas and Electric Co.

^b Non-coincident peak demand is the sum of the individual monthly peak electric demands from the four utilities listed above.

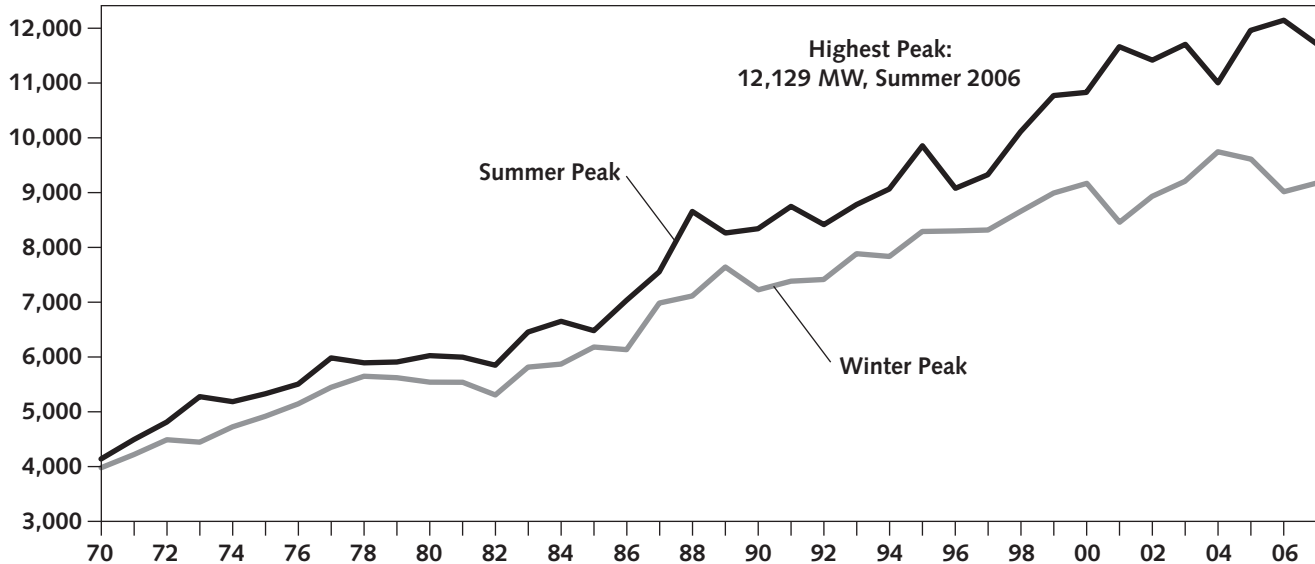
^c Load Factor = $\frac{\text{Annual Energy Demand (kWh)}}{\text{Peak Demand (kW)} \times 8,760 \text{ (hours/year)}}$

^d Beginning in January 1988, data includes Wisconsin Electric Power Co. generation from Presque Isle, Michigan.

^p Preliminary estimates.

Source: Wisconsin electric utility annual reports submitted to the Public Service Commission of Wisconsin (1970-2007); <http://psc.wi.gov/apps/annlreport/content/munilist.aspx>.

Eastern Wisconsin Electric Utility Non-Coincident Peak Demand,^{a,b} 1970-2007 (Megawatts)



Eastern Wisconsin Electric Utility Power Load and Non-Coincident Peak Demand, by Month,^{a,b} 2007

Month	Load (Millions of kWh)	Non-Coincident Peak Demand (MW)
January	5,742	8,857
February	5,329	9,238
March	5,404	8,638
April	5,190	8,096
May	5,316	9,248
June	5,786	11,361
July	6,253	11,666
August	6,549	11,698
September	5,576	11,087
October	5,851	9,841
November	5,409	8,888
December	6,740	9,158
Total	69,145	

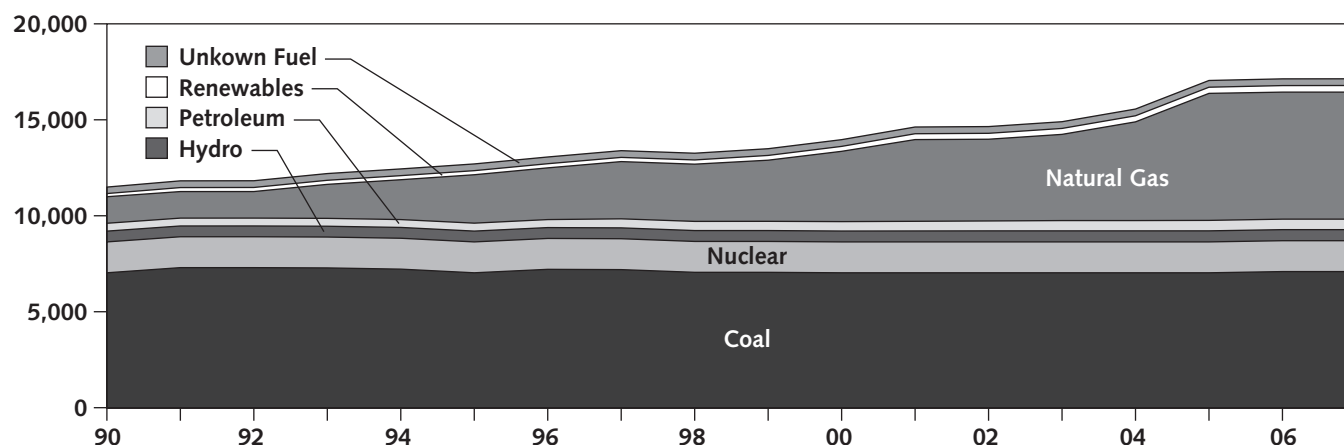
^a Wisconsin Electric Power Co., Wisconsin Power and Light Co., Wisconsin Public Service Corp., and Madison Gas and Electric Co.

^b Non-coincident peak demand is the sum of the individual monthly peak electric demands from the four utilities listed above for each month.

Source: Wisconsin electric utility annual reports submitted to the Public Service Commission of Wisconsin (2007).
<http://psc.wi.gov/apps/annlreport/content/munilist.aspx>.

Wisconsin Electric Generating Capacity, by Type of Plant 1990-2007 (Megawatts)

In 2007, Wisconsin's electric generation capacity increased by 4 megawatts. These data represent electricity generation capacity by Wisconsin's investor-owned utilities, municipal utilities, electric co-operatives, independent power producers, and other non-utility operations (e.g., paper mills).



Year	Coal	Nuclear	Hydro	Petroleum	Natural Gas	Renewables ^c	Unknown Fuel	Total ^a
1990	7,028	1,609	562	410	1,383	165	337	11,494
1995	7,028	1,609	564	413	2,522	213	350	12,700
2000	7,028	1,609	567	491	3,662	258	350	13,965
2001	7,028	1,609	571	503	4,258	305	350	14,624
2002	7,028	1,609	576	516	4,258	308	350	14,646
2003	7,028	1,609	576	536	4,491	310	350	14,900
2004	7,028	1,609	576	536	5,143	317	350	15,560
2005	7,028	1,609	576	545	6,618	321	350	17,048
2006	7,091	1,609	576	547	6,618	341	350	17,133
2007	7,091	1,609	576	547	6,618	344	350	17,137

^a Capacity is as of December 31 of each year.

^c Renewables data includes biomass (e.g., wood, paper byproducts, landfill gas, and methane digester gas), solar and wind but does not include out-of-state RPS-registered capacity. Also, additional RPS-registered capacity is included in the coal, hydro, and petroleum columns.

Sources: Energy Information Administration, *Electric Power Annual*, [DOE/EIA-0348(2007)](October 2007), http://www.eia.doe.gov/cneaf/electricity/epa/epa_sprdshts.html. This table has been historically revised with data from the Public Service Commission of Wisconsin, Wisconsin Generating Capacity by Fuel; EIA data were used in previous publications.

Wisconsin Electric Generating Capacity, by Type of Plant and Type of Producer, 1990-2007 (Megawatts)

These data represent the generation capacity of utilities, who are required to have power available to customers via the power grid; and non-utility producers who produce power for wholesale (Independent Power Producers) to utilities; and non-utilities which are primarily industrial sector businesses producing electricity for in-house use, any excess of which may also be sold to utilities for retail re-sale on the power grid.

The drop in capacity at the Investor-Owned Utilities in 2005 and 2007 corresponds to the increase in capacity for Independent Power Producers (IPPs) during the same years. This shift of capacity is due to the sale of Wisconsin's nuclear power plants to IPPs.

These data were not available until 1990; the capacity listed for 1990 represents in-place capacity for all previous years of operation.

Year	Utility Generating Capacity ^c				Non-Utility Generating Capacity			All Producers Capacity Total
	Cooperatives	Investor-Owned Utilities	Municipal	Utility Total	IPP ^a	Non-Utility	Non-Utility Total ^b	
1990	937	9,404	204	10,544	62	889	951	11,494
1995	937	10,452	290	11,678	62	960	1,022	12,700
2000	937	10,794	421	12,151	830	984	1,814	13,965
2001	1,033	10,798	432	12,263	1,361	1,000	2,361	14,624
2002	1,033	10,804	440	12,277	1,362	1,008	2,370	14,647
2003	1,033	11,057	440	12,530	1,362	1,008	2,371	14,901
2004	1,036	11,058	492	12,586	1,961	1,013	2,974	15,560
2005	1,037	11,098	501	12,636	3,397	1,015	4,412	17,048
2006	1,037	11,098	566	12,702	3,397	1,034	4,431	17,133
2007	1,037	10,024	566	11,628	4,471	1,038	5,509	17,137

^a IPPs are independent power producers allowed under law to sell their power to wholesalers such as utility co-operatives. They are barred from selling their power on the retail market.

^b Non-utility sources refers to industrial power producers such as paper mills.

^c Utilities include investor-owned utilities, electric co-operatives and municipalities.

Source: Public Service Commission of Wisconsin, Accounts and Finance Division, *Generating Plants Operated by Wisconsin Electric Utilities*, Bulletin #46 (1971-1994) and personal communications 2002; U.S. Department of Agriculture, Rural Electrification Administration, *Annual Statistical Report*, REA Bulletin 1-1 (1971-1994); Public Service Commission of Wisconsin, unpublished electrical generation data.

Wisconsin Electric Power Generation, by Type of Plant 1970-2007

(Millions of kWh)

Total electric generation by Wisconsin utilities decreased 4.8 percent in 2007.

Electricity generated by non-utilities is not included in the total sales column. Total sales reflects only utilities and IPPs. Imports and losses is a reflection of the difference between total sales recorded by EIA and total sales reported by utilities and IPPs as defined in the notes below this table.

Year	Electricity Generation by Utilities ^g							IPP ^b	Nonutility ^e	Total IPP and Nonutility	Imports & Losses ^c	Total Sales ^h
	Coal	Nuclear	Hydro	Petroleum ^d	Natural Gas	Renewables ^f	Total Utilities					
1970	25,253	155	1,413		390		27,211			0	-2,496	24,715
1975	20,615	10,292	1,483		691		33,081			0	-1,805	31,276
1980	26,383	9,912	1,628		393		38,316			0	-571	37,745
1985	28,840	10,978	2,046		20		41,884			0	-159	41,725
1990 ^{a,r}	27,956	11,224	1,301	76	393		40,950			0	8,248	49,198
1995 ^r	32,994	10,970	1,528	97	924		46,513			0	11,454	57,967
2000 ^r	41,736	11,459	1,458	52	965	43	55,713			0	8,976	64,689
2001 ^r	40,855	11,507	1,739	99	815	51	55,066	2		2	10,909	65,977
2002 ^r	42,368	12,449	2,099	43	910	62	57,931	0		0	9,068	66,999
2003 ^r	44,140	12,220	1,513	93	1,008	62	59,036	404		404	7,801	67,241
2004 ^r	45,149	11,888	1,964	56	574	69	59,700	0		0	8,321	68,021
2005 ^r	45,219	7,574	1,934	75	2,185	105	57,092	2,648	275	2,923	10,596	70,336
2006 ^r	42,936	12,234	1,831	215	1,928	234	59,378	3,662	2,534	6,196	6,769	69,809
2007 ^p	38,863	12,145	1,293	734	3,168	304	56,507	4,289	2,534	6,823	10,571	71,367

^a Beginning in 1990, data are from the Public Service Commission of Wisconsin, except for sales data.

^b IPPs are independent power producers allowed under law to sell their power to wholesalers such as utility co-operatives. They are barred from selling their power on the retail market. The primary fuel used by IPPs is natural gas, followed by hydroelectric and other renewable resources, and some coal.

^c A negative sign indicates Wisconsin utilities exported electric power to other states.

^d Petroleum (oil) was split from natural gas as a generation resource starting in 1990. Prior to 1990, they were combined in this table.

^e Non-utility generation sources were available prior to 2005, but not collected separately until then. Non-utility sources refers to industrial power producers such as paper mills. These generation facilities primarily use renewable and hydroelectric resources to generate electricity.

^f The renewables category includes biomass, methane from landfills and digesters, solar and wind resources.

^g Utilities include investor-owned utilities, electric co-operatives and municipalities.

^h Sales figures for all years are from the EIA Electric Power Monthly.

^r These data have been revised from previous publications that used federal Department of Energy, Energy Information Administration data. 2007 data are EIA-sourced data that will be revised using PSC data.

^p Preliminary.

Source: Public Service Commission of Wisconsin, Accounts and Finance Division, *Generating Plants Operated by Wisconsin Electric Utilities*, Bulletin #46 (1971-1994) and personal communications 2002; U.S. Department of Agriculture, Rural Electrification Administration, *Annual Statistical Report*, REA Bulletin 1-1 (1971-1994); US Department of Energy, Energy Information Administration, *Electric Power Monthly* (March 2008); Public Service Commission of Wisconsin, unpublished electrical generation data.

Wisconsin Electric Utility Fuel Costs of Power Generation, by Type of Plant, 1970-2007 (Cents Per kWh)

In this table, only the cost of fuel per kilowatt-hour of generation is reported. The table on the next page includes all costs of generation. Hydroelectric plants are not included here because they have no associated fuel costs.

Year	Fossil Fuel Steam (Coal)	Nuclear Steam	Internal Combustion ^a	All Plants
1970	0.43	0.16	0.75	0.44
1975	1.01	0.36	1.47	0.75
1980	1.72	0.50	3.58	1.40
1985	2.02	0.61	6.76	1.60
1990 ^e	1.61	0.52	4.50	1.27
1995 ^e	1.33	0.48	3.62	1.12
2000 ^e	1.24	0.52	6.41	1.14
2001 ^e	1.27	0.54	6.36	1.15
2002 ^e	1.31	0.50	4.61	1.12
2003 ^e	1.37	0.48	6.49	1.21
2004 ^e	1.44	0.47	6.19	1.24
2005 ^e	1.58	0.52	10.29	1.74
2006 ^e	1.78	0.54	8.28	1.76
2007^e	2.00	0.60	7.49	2.12

^a Internal combustion includes both gas-powered turbines and diesel-powered engines.

^e Estimate by Wisconsin Office of Energy Independence based on amount of generation by the five major Wisconsin utilities.

Source: Public Service Commission of Wisconsin, Accounts and Finance Division, *Generating Plants Operated by Wisconsin Electric Utilities*, Bulletin #46 (1971-1994); annual reports of the five major Wisconsin electric generating utilities (2007).
<http://psc.wi.gov/apps/annlreport/content/munilist.aspx>

Wisconsin Electric Utility Total Costs of Power Generation, by Type of Plant and Cost of Purchased Power, 1970-2007

(Cents Per kWh)

This table shows the total cost of generating one kWh of electricity by various technologies in Wisconsin's electric utility plants. The average cost of power at all plants is almost double the previous peak in 1983 of 2.21 cents per kWh. The cost of purchased power has risen in recent years and is nearly two-thirds as expensive as electricity generated in Wisconsin.

Year	Fossil Fuel Steam (Coal)	Nuclear Steam	Internal Combustion ^a	Hydro	All Plants	Purchased Power	Average Cost
1970	0.55	0.29	1.76	0.27	0.53	NA	NA
1975	1.25	0.51	2.73	0.32	0.97	NA	NA
1980	2.13	0.86	5.74	0.52	1.72	NA	NA
1985	2.55	1.32	19.12	0.61	2.09	NA	NA
1990 ^e	2.13	1.50	10.87	1.00	1.94	2.22	1.99
1995 ^e	1.80	1.63	4.71	0.71	1.75	2.17	1.83
2000 ^e	1.75	2.16	7.73	0.86	1.91	3.36	2.24
2001 ^e	1.76	2.37	7.63	0.90	1.95	3.90	2.41
2002 ^e	1.87	2.18	6.09	0.75	1.97	3.64	2.40
2003 ^e	1.91	2.40	8.02	1.12	2.10	4.05	2.61
2004 ^e	1.97	2.46	14.63	1.06	2.19	4.26	2.72
2005 ^e	2.11	3.16	16.02	1.21	2.82	4.92	3.53
2006 ^e	2.68	2.10	14.81	1.40	3.01	5.55	3.88
2007^e	2.94	2.54	11.76	1.65	3.42	5.58	4.23

^a Internal combustion includes both gas powered turbines and diesel powered engines.

^e Estimate by Wisconsin Office of Energy Independence based on amount of generation by the five major Wisconsin utilities.

NA – Not Available

Source: Public Service Commission of Wisconsin, Accounts and Finance Division, *Generating Plants Operated by Wisconsin Electric Utilities*, Bulletin #46 (1971-1994); annual reports of the five major Wisconsin electric generating utilities (2007).
<http://psc.wi.gov/apps/annlreport/content/munilist.aspx>

Electric Utility Sulfur Dioxide Emissions and Emission Rates 1980-2007

(Tons and Pounds Per Million Btu)

Utility sulfur dioxide emissions decreased 9.2 percent from 2006 to 2007. Continued declines in total emissions will depend on the growth in coal fired generation, old plant retirement, the effectiveness of future energy efficiency efforts and increased use of natural gas and renewable energy.

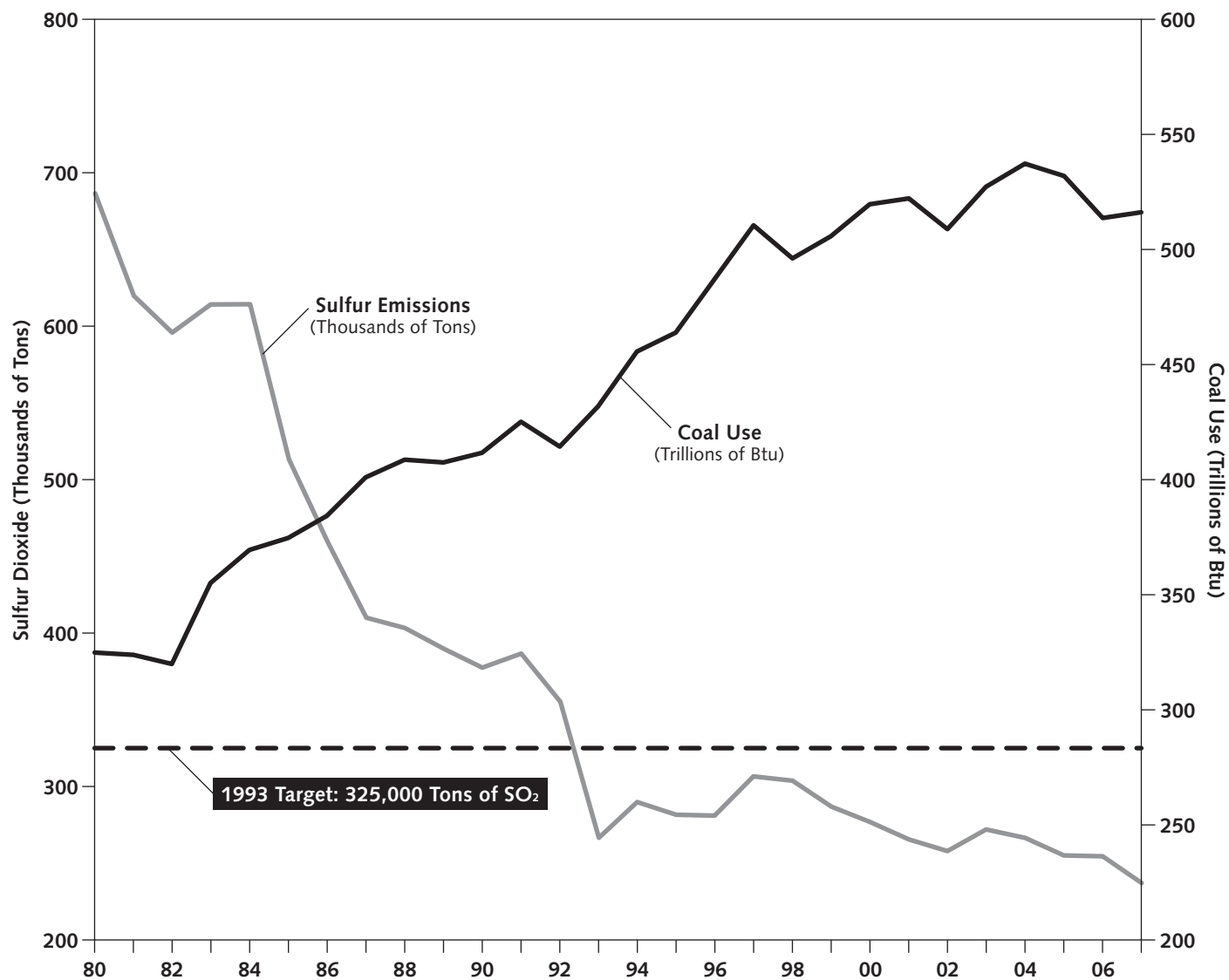
Utility	1980		1990		2000		2006		2007 ^P	
Dairyland Power Cooperative										
Alma	23,641	(5.9)	6,510	(2.0)	3,445	(0.8)	7,457	(1.1)	8,847	(1.1)
J.P. Madgett	4,088	(1.0)	7,330	(0.7)	5,378	(0.4)	6,345	(0.4)	7,764	(0.4)
Genoa	43,516	(6.4)	28,130	(4.0)	8,165	(0.8)	13,947	(0.8)	13,072	(0.8)
Stoneman	4,663	(6.6)	790	(2.1)	0	(0.0)	0	(0.0)	0	(0.0)
Madison Gas and Electric Co.										
Blount Street	8,436	(5.0)	3,851	(1.5)	6,923	(2.0)	6,987	(1.9)	2,705	(1.9)
Northern States Power Co.										
Bay Front	2,708	(NA)	393	(1.8)	786	(1.1)	923	(1.1)	1,211	(1.1)
Wisconsin Electric Power Co.										
Oak Creek	122,472	(4.1)	45,650	(2.6)	22,831	(0.7)	15,137	(0.6)	13,082	(0.6)
Port Washington	42,295	(5.1)	4,009	(2.4)	15,572	(1.9)	3	(1.6)	0	(1.6)
Valley	41,761	(4.5)	14,053	(2.4)	15,831	(1.8)	8,521	(1.6)	7,029	(1.6)
Pleasant Prairie	4,972	(1.0)	26,933	(0.7)	28,726	(0.6)	32,175	(0.6)	30,408	(0.6)
Wisconsin Power and Light Co.										
Blackhawk	2,006	(6.5)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Columbia 1	24,937	(0.6)	18,616	(1.3)	15,056	(0.7)	15,330	(0.6)	11,939	(0.6)
Columbia 2	14,614	(0.6)	13,909	(0.8)	13,270	(0.7)	14,490	(0.7)	12,395	(0.7)
Edgewater 1-4	60,014	(5.4)	38,021	(2.7)	8,962	(0.7)	8,217	(0.7)	8,145	(0.7)
Edgewater 5	0		6,744	(0.7)	8,744	(0.6)	7,731	(0.6)	9,680	(0.6)
Nelson Dewey	32,304	(5.6)	10,985	(2.0)	14,275	(2.0)	15,698	(1.7)	13,398	(1.7)
Rock River	14,139	(6.0)	7,220	(3.3)	25	(0.0)	10	(0.0)	0	(0.0)
Wisconsin Public Service Corp.										
Pulliam	42,087	(4.9)	25,631	(3.3)	6,314	(0.4)	10,937	(0.4)	10,697	(0.4)
Weston 1,2	21,009	(5.6)	6,589	(1.8)	3,340	(0.6)	4,095	(0.6)	3,345	(0.6)
Weston 3	0		7,598	(0.7)	8,358	(0.6)	8,867	(0.6)	6,560	(0.6)
Municipal Utilities										
Manitowoc	1,318	(NA)	1,727	(1.3)	3,282	(1.1)	175	(1.1)	521	(1.1)
Marshfield	1,651	(NA)	139	(1.6)	0	(0.0)	0	(0.0)	0	(0.0)
Menasha	991	(NA)	695	(2.0)	79	(1.8)	85	(1.6)	0	(1.6)
Total										
Utility Sources	513,622	(3.8)	275,523	(1.6)	189,374	(0.8)	177,130	(0.7)	160,798	(0.7)
All Other Sources	172,777		101,517		87,115		77,000		76,000	
All Stationary Sources	686,399		377,040		276,489		254,130		236,798	
Percent Utility Sources	74.8%		73.1%		68.5%		69.7%		67.9%	

NA – Not available.

^P Preliminary estimates.

Source: Wisconsin Department of Natural Resources, Annual Survey of Point Source Emissions, Sulfur Dioxide and Nitrogen Oxides Emissions Report PUBL-AM-343 (1986-2007).

Wisconsin Sulfur Dioxide Emissions and Coal Use 1980-2007



Source: Wisconsin Office of Energy Independence.

Wisconsin Utility Power Plant Inventory, 2007^a

Utility/Site	Nameplate Capacity (MW)	Number of Units	Primary Fuel
Dairyland Power Cooperative			
Alma 1-3	45.0	3	Coal
Alma 4,5	136.0	2	Coal
J.P. Madgett	387.0	1	Coal
Flambeau	22.0	3	Hydro ^b
Genoa 3	345.6	1	Coal
Elk Mound	71.0	2	Gas
Seven Mile Creek	3.0	3	Gas, Landfill
Madison Gas and Electric Co.			
Blount Street 3,4,5,6,7	177.5	5	Coal/RDF ^c
Fitchburg 1,2	57.6	2	Gas
Nine Springs	16.2	1	Gas
Sycamore	41.6	2	Gas
Rosiere	11.0	17	Wind
West Marinette	83.0	1	Gas
West Campus	169.3	3	Gas
Diesel	54.0	1	Oil
Northern States Power Co.			
Bay Front 4,5,6	68.0	3	Wood/Coal
Flambeau	16.0	1	Gas
French Island 1,2	31.3	2	Wood/RDF ^c
French Island 3,4	157.6	2	Gas
Wheaton 1-6	322.0	6	Gas/Oil
Various Hydro	235.4	57	Hydro ^b
Wisconsin Electric Power Co.			
Concord	381.2	4	Gas
Germantown 1,2,3,4	244.8	4	Oil
Germantown 5	106.9	1	Gas
Milwaukee	11.0	1	Coal
S. Oak Creek 5-8	1191.6	4	Coal
S. Oak Creek 9	19.6	1	Gas
Pleasant Prairie 1,2	1233.0	2	Coal
Pleasant Prairie 3	2.0	1	Oil
Point Beach 1,2	1047.6	2	Nuclear
Point Beach 5	25.0	1	Oil
Port Washington 1-3	579.0	3	Gas
Valley 1,2	272.0	2	Coal
Valley 3	2.7	1	Oil
Various Hydro	13.6	8	Hydro ^b
Paris	381.2	4	Gas
Byron	1.2	2	Wind
Wisconsin Public Service Corp.			
Pulliam 3-5	110.0	3	Coal
Pulliam 6-8	300.2	3	Coal
Weston 1-3	492.1	3	Coal
Weston 31,32	72.5	2	Gas
W. Marinette 31,32,33 ^e	167.1	3	Gas
Oneida Casino	4.0	2	Oil
Eagle River	4.0	2	Oil
Various Hydro	55.3	30	Hydro ^b
Glenmore	1.2	2	Wind
Lincoln	9.2	14	Wind
Pulliam 31	83.0	1	Gas
De Pere	187.2	1	Gas

Utility/Site	Nameplate Capacity (MW)	Number of Units	Primary Fuel
Wisconsin Power and Light Co.			
Blackhawk 3,4	50.0	2	Gas
Columbia 1 ^f	512.0	1	Coal
Columbia 2 ^f	511.0	1	Coal
Edgewater 3	60.0	1	Coal
Edgewater 4 ^g	330.0	1	Coal
Edgewater 5 ^h	380.0	1	Coal
South Fond Du Lac	344.0	4	Gas
Nelson Dewey 1,2	200.0	2	Coal
Berlin	2.4	3	Gas, Landfill
Rock River 1,2	150.0	2	Gas
Rock River 3-6	144.0	4	Gas
Sheepskin	40.0	1	Gas
Sheboygan Falls	380.0	2	Gas
Various Hydro	36.6	12	Hydro ^b
Municipal Utilities			
Manitowoc, City of	11.0	2	Gas
	64.0	3	Coal/RDF ^c
	24.5	1	Gas
Menasha, City of	28.0	3	Coal
Dominion Energy	560.1	1	Nuclear
Wisconsin Public Power Inc			
	60.5	1	Gas
	1.1	1	Oil

	Nameplate Capacity (MW)	Number of Units	Primary Fuel
Statewide Utilities	6867.0	46	Coal
Statewide Utilities	6417.0	73	Gas
Statewide Utilities	460.5	194	Hydro ^b
Statewide Utilities	1607.7	3	Nuclear
Statewide Utilities	132.0	62	Other Renewables
Statewide Utilities	753.9	93	Petroleum
Statewide Utilities	52.6	55	Wind
Statewide Utility Totals	16290.7	526	All

^a Does not include non-utility generation (e.g., industrial paper producers).

^b Hydroelectric capacity differs from sums on other tables due to different data sources

^c RDF is Refuse Derived Fuel.

^d The Kewaunee unit is owned and operated by Dominion Energy.

^e The West Marinette 33 unit is jointly owned by Wisconsin Public Service Corp. (68%) and the City of Marshfield (32%).

^f The Columbia 1 & 2 units are owned by Alliant Energy (46.2%), Wisconsin Public Service Corp. (31.8%) and Madison Gas & Electric Co.(22.0%).

^g The Edgewater 4 unit is owned by Alliant Energy (68.2%) and Wisconsin Public Service Corp.(31.8%).

^h The Edgewater 5 unit is owned by Alliant Energy (75%) and Wisconsin Electric Power Co.(25%).

Source: U.S. Department of Energy, Energy Information Administration, Existing Electric Generating Units in the United States by State, Company and Plant, <http://www.eia.doe.gov/cneaf/electricity/page/capacity/capacity.html>.